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UNIVERSITY MUSICAL ENCYCLOPEDIA

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UNIVERSITY MUSICAL ENCYCLOPEDIA

THE THEORY OF MUSIC

and PIANO TECHNIQUE

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THE

THEORY OF MUSIC

MUSICAL FORM

CHAPTER I

NECESSITY FOR FORM IN MUSIC

Conformity in Variety—Monotony—Scientific Value of Musical Form—Plan of a Musical Work and Landscape Garden—Unfolding of Musical Faculty—Beethoven and Shakespeare—Thought and Emotion—Selection of Appropriate Form.

THE most ignorant and inattentive listener can hardly sit through the performance of an opera, an oratorio, or a symphony without noticing that the music occasionally changes from loud to soft and from slow to fast. A thousand details escape him altogether, and he would describe the music as tuneless. His first impression, then, would be an elementary idea of outline or form. Before he can get a clear idea of form, the many and varied themes or tunes must be familiar to his ear; he must not only recognize each tune as it appears, but he must also bear in mind the order in which the tunes appear, and the different keys in which they occur. This is difficult, for along with the perception of the particular often goes non-recognition of the general.

The form of a great temple is easily seen from a remote hill; but he who studies the details of a façade, column, and ornament, standing in the shadow of a lofty wall, must exert himself mentally if he wishes his imagination to build up for him a picture of the whole. Likewise, a study of the printed score of a great musical work will reveal details that even the practised ear of a musician can with difficulty hear.

If our most ignorant and inattentive listener becomes attentive, he will notice that all symphonies are more or less alike in their structure, however much they may differ in subject-matter and detail. He will not believe that this conformity of structure is purely accidental; nor can he think that the great as well as the lesser composers have merely followed the examples of their predecessors. Why this conformity in variety? Why not have a "Rondo" symphony of four or five or more rondos? Why not an "Adagio" symphony consisting of several slow movements? Because the result would be unbearably monotonous, and Horace long ago told us that a poem, designed to delight our minds, must sink to the bottom if it ever so little dips below the surface.

Composers make use of form in order to avoid monotony, and also for the sake of clearness. Form gives unity in variety. Unity without variety is monotonous; variety without unity is diffuse and vague. "When I was a boy," says Huxley, "I had abundant opportunities of hearing [the music of] that great old master, Sebastian Bach. I remember perfectly well the intense satisfaction and delight which I had in listening, by the hour together, to Bach's Fugues. It is a pleasure which remains with me, I am glad to

think; but of late years I have tried to find out the why and the wherefore, and it has often occurred to me that the pleasure derived from musical compositions of this kind is essentially of the same nature as that which is derived from pursuits which are commonly regarded as purely intellectual. I mean, that the source of pleasure is exactly the same as in most of my problems in morphology—that you have the theme in one of the old master's works followed out in all its endless variations, always appearing and always reminding you of unity in variety."

That a high priest of science, as Huxley was, should so testify to the scientific value of musical form is enough to make one conclude that form is the chief source of interest in a musical work. That conclusion is erroneous. Form is the servant; ideas are the master. The function of form, the servant, is to help ideas, the master, to a better expression. It is quite possible that Huxley found more to interest him in the musical ideas expressed in Bach's fugue form than he imagined. It was form, however, which made the musical ideas clear to him. Omitting musical ideas, it is not difficult to construct a fugue more perfect in balance and symmetry of form than many of Bach's fugues are.

It is no more trouble to plan a musical work than a landscape garden. There is a path here, a row of trees there, a mass of shrubs in the foreground, and a hedge around the orchard—all conforming to a well-designed and balanced scheme. Considered as a design, and without atmospheric effects, our trees, paths, shrubs, and hedges are of no interest. You must see your park when the sun hangs a luminous saffron cloud

behind the firs, when the long shadows of evening creep toward you, and the lanes lose themselves in dusky distance. Return to it when the summer stars sparkle above you and the moon "tips with silver all these fruit-tree tops"; wander through it in October when the leaves fall from the sapless branches—"bare, ruined choirs where late the sweet birds sang"; visit it at Yuletide, when stalk and stem are veiled in hoarfrost and snow; come in springtime, after the warm rain of April has awakened the buds and blossoms from their winter sleep.

Are there not an indescribable beauty and a variety of beauty that are independent of the plan? Does the plan, in fact, add any charm to the landscape? It may or it may not; but if the eye could not take in a panorama, and had to get an impression as best it could through a narrow slit moving across the line of vision, only allowing a small section of the landscape to be seen at a time, it is certain that each picture would destroy the preceding picture, leaving nothing but a confusion of images on the mind, unless the designer had judiciously repeated at more or less regular intervals those pictures he wished the mind of the observer to retain.

Now, it is plainly impossible to get a bird's-eye view of a symphony as of a landscape or a cathedral. We only see a little of the tone-picture at a time. No sooner is one sound born than it dies into silence, making room for the next. And the necessity for design and balance is nowhere more imperative than in music, where all is so fleeting and impalpable—mere vibrations of the tympanic membrane.

Imagine the impression of chaos an hour of hap-

hazard melody, endless harmonic changes, and varying rhythms would make on us. Now, Beethoven's Ninth symphony at its first performance lasted one hour and five minutes. Form and structural ingenuity alone shape such a vast conglomeration of sound into a musical whole. Without form, Beethoven's chords and phrases would no more resemble a symphony than a mound of stone, brick, and mortar could be called a cathedral. Herbert Spencer says:

"You have, perhaps, in the course of your life, had some musical culture; and can recall the stages through which you have passed. In early days a symphony was a mystery; and you were somewhat puzzled to find others applauding it. An unfolding of musical faculty that went on slowly through succeeding years brought some appreciation; and now these complex musical combinations which once gave you little or no pleasure give you more pleasure than any others. Remembering all this, you suspect that your indifference to certain still more involved musical combinations may arise from incapacity in you, and not from faults in them."

"Unfolding of musical faculty" means that the listener more and more understands the thought and feeling of the composer. This is a slow process which cannot be encompassed at a sitting by the study of an analytical programme. Any student, without an "unfolding of musical faculty," can clearly understand the form of a composition in a few hours; but Plato's assertion that there is a deeper harmony as there is a deeper astronomy—a harmony not for the ear—is as true to-day as it was twenty-four centuries ago.

Spencer has elsewhere pointed out that the chief

function of the brain is feeling, not intellect; the greater the brain, the more feeling. It is the fashion to place that which is commonly called intellect on a higher plane than that which is commonly called feeling; but feeling, in the most comprehensive sense of the word, has always reigned supreme. No change of dynasty can take place till human nature is other than it is. Students of music often get no farther than the form, which has been invented, instead of seeking first variety and contrast of those emotions which have been the birthright of the human heart since time immemorial. It is wrong to approach a work of art in the spirit of an anatomist about to dissect.

Morphology, the science of forms in organisms, is of little value in the study of music, compared with physiology, the important science of the function of these forms. It is worse than useless to emulate Jedediah Buxton, the prodigious calculator, who died in 1772. He was seen to be deeply interested in a performance of "Richard III"; but when asked for an opinion on the play, he replied by giving the number of words that Garrick, acting in it, had spoken. Shakespeare himself could not have done that! Neither could Beethoven have told the number of bars in any of his symphonies; nor the number of bars in any one movement; nor the number of bars in any division or in any theme in the movement. The composer's only care is that the transition from one emotion to another shall be natural and in a manner most likely to awaken the same emotions in the hearer.

Now, as all thought takes its rise in the emotions, it follows that that which stirs the emotions must stimu-

late the thought-centers, and the mingled emotions and thoughts which music quickens will differ in each hearer in so much as his intellect and temperament differ from those of the composer. As the proportionate amount of intellect and feeling varies in every composer, it is not surprising that forms are continually changing. Certain forms having arisen, they develop, mature, and decay; while new forms take their places. On the other hand, hope, longing, awe, fear, dread, devotion, anger, hate, scorn, love, tenderness, pity, surprise, amazement, content, gaiety, mirth are at least as old as humanity—the same through all generations.

The value of a musical work is not in its form; but the value of a musical work is enormously enhanced by the selection on the part of the composer of that form best adapted to the clear and forcible expression of the ideas contained in the work.

Each composer goes his own way—a sailor on the restless tide of passion. They all learn navigation; and one sails west, another to the Orient; one explores the legendary seas of the silent North, another basks in the sunny South; but they all—the fantastic and the somber, the tragic and the gay—fashion their works on some model of form.

CHAPTER II

CLASSES, CHARACTERS, AND KINDS OF MUSIC

Identity of Class in Sacred and Secular Tunes—Distinction of Character—Necessity for Musical Forms—Homophonic and Polyphonic Composition—Sacred and Secular Characters—Vocal, Instrumental, and Accompanied Vocal Music—Examples.

IF we examine several hymn-tunes, we shall find that, while each may be completely and distinctly different from the others in key, melody, harmony, rhythm and general effect, nevertheless there is still something about them which entitles them to be considered as belonging to the same class—something showing that each and all of them were intended for the same common purpose. This conclusion would be arrived at from the broad and dignified character of the music, from its clear and striking divisions into portions of a certain length, and from the well-marked and strong cadences employed. This *something* is simply the structural design or plan of the music.

If, again, we look at a number of national airs, we shall find that here also, although, as we may say, the tunes are as different from each other as night is from day, yet there is something in their general design which distinguishes them as belonging to the same class; while the scope of the melody, its ornamentation, and its peculiarity of rhythm, combined with its secular or

sensuous feeling, make it almost impossible to confound such music with that of the hymn-tune order—their *characters* being totally different.

We have selected these two varieties of musical composition because they are the simplest and the best known of sacred and secular tune; at the same time it may be pointed out that the distinction between them is not always so striking as in music of a more elaborate type. It would be rather premature to introduce examples of an advanced or complex nature here; and so, without diverging much from the path of simplicity and popularity, let us say that, in listening to an anthem having a free organ accompaniment (not consisting of the voice parts only, but having an independent design of its own), one would not require much musical education to perceive that it was not a hymn-tune that was being sung; while an Anglican chant could never be mistaken for either the one or the other of the two former. The hurried recitation of the chant, the rhythmical progression of the hymn-tune, and the varied configurations of the anthem all indicate unmistakably that they are not all of one kind, but are constructed on entirely different plans. There are, therefore, various orders of musical compositions, exhibiting different structural ideas or designs, which go under the name of musical forms.

This is not the place for lengthened argument as to real necessity for specific forms in musical art. Such forms, however, do exist and are largely employed as concrete wholes, according to the recognized principles of structural composition. It is quite true that a great deal of music is fashioned after no definite form; indeed, in many cases it is entirely without form. Never-

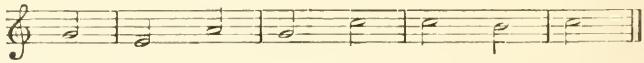
theless musical forms of certain recognized types (which have served their cause so well, by giving to music strength and stability, meaning and purpose) must still continue—otherwise the art must shrivel into puerility and inanity.

In its structural design music may be divided into two classes, namely, homophonic and polyphonic. Homophonic composition is that which contains but one principal part. There may be several parts employed in the composition, but one is distinctly predominant beyond the others, either by reason of its striking individuality of construction, or because of the supreme beauty of its melody. The word homophonic literally means likeness of sound, or sameness of sound; and in the present case it doubtless applies to the sameness, or want of variety, in a composition containing but one principal part, compared with the rich and interesting contrast that exists in a piece where a number of parts are employed in unfolding and developing the musical idea.

Polyphonic composition is that in which there are several parts, all of equal importance, and all being recognizable portions of the particular design adopted by the composer—all having a responsible share in working out the plan of the composition. The word polyphonic means having many sounds; and its application to a composition with a number of real parts will be perfectly intelligible.

The following (Ex. I) is a line of a well-known hymn-tune:

Ex. I

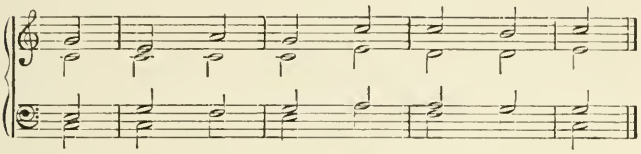


A REVERIE

From the Painting by Frank Dicksee

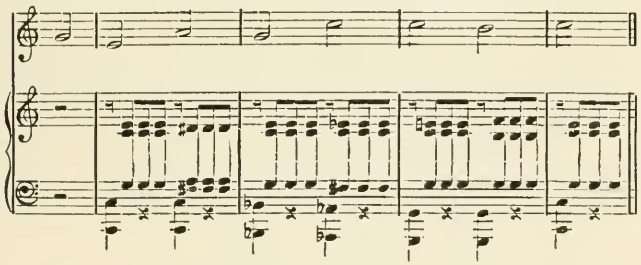
The above (Ex. I) is a monophonic example. It is a single part, possessing sufficient merit to be considered complete in itself. We might enhance its effect, however, by means of harmony supplied by other voices, as in Ex. II; when it would become homophonic—it would still contain but one principal part.

Ex. II



Here (Ex. II) the treble is still the principal part—the part by which the music may be recognized: the other parts are mere auxiliaries, and could not be separately and independently employed as the treble part can. Again, if we treat the melody to an instrumental accompaniment, as at Ex. III, we still have the one predominant part, which, were it taken away, would leave nothing but a mechanical and meaningless jingle. This example is also homophonic.

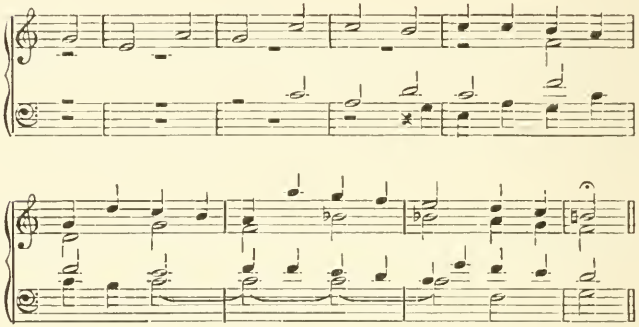
Ex. III



If, however, the music be arranged in such a man-

ner as to make each part employed essentially requisite, and all the parts equally responsible for the completion of the musical effect, then it becomes polyphonic, as in Ex. IV.

Ex. IV



It is not difficult to discriminate between the two classes of music spoken of, so long as their respective features are clearly defined. It often happens, however, that the homophonic and the polyphonic come into collision and get entangled with each other, as in cases of the following description: songs with pianoforte accompaniment and violin obbligato; duets in which the voices sing together only at intervals; modern hymn-tunes in which sometimes one part and sometimes another has a struggle for temporary supremacy; national or popular airs harmonized for vocal and instrumental use in which the treble part often takes a subordinate position for a time, while some of the other parts become prominent, and where, by fugal treatment, consequence is given to the different parts; songs of slender construction with elab-

orate accompaniments. These and other cases render it difficult, and sometimes impossible, to say to which of the classes mentioned the music belongs. We have still a very convenient alternative left, however, which will get us over the difficulty—all music may be classed as homophonic, polyphonic, or mixed. This latter classification must only be adopted after careful deliberation.

Musical compositions are further characterized as sacred and secular. At the present day, or at least according to the evidence of modern music, it might be difficult to prove that these two characters really exist as separate and essential features of musical composition; for, however great the line of demarcation between the two may have been in the past, there can be no question as to the mixing and the overlapping of the sacred and the secular at the present day.

In one sense it is true that there is secular music to be found in sacred places, and sacred music in secular places. Sir Arthur Seymour Sullivan's tune to "Onward, Christian Soldiers" is not a bit more sacred than General Reid's "Garb of Old Gaul"; and the popular tune to "We Plough the Fields and Scatter" may reasonably be considered to be quite as secular in its character as "The Men of Harlech" or "God Bless the Prince of Wales." But yet all music that is really good, and which must consequently have a purifying influence, is emphatically sacred music. The real application of the terms sacred and secular will therefore very largely, if not entirely, depend upon whether the music be used for sacred or secular purposes, or in connection with sacred and secular subjects.

Independently of class and character, musical com-

position may still be arranged into different kinds—vocal music, instrumental music, and accompanied vocal music. Vocal music is written for voices only, and is arranged in such a manner as to produce an effect of completeness and fullness without any instrumental assistance being required. Pure vocal music is not intended to be accompanied; and although, sometimes as a matter of convenience, and sometimes from entirely mistaken motives, instrumental assistance is introduced, yet the practice is to be deprecated—it is seldom beneficial, and very often detrimental to the musical effect. Instrumental music is written for and performed by musical instruments only. Accompanied vocal music may be said to include in a general way all music that is intended for performance by voices and instruments together. Of course this rather places the instrumental portion of the music in a subordinate position; whereas, in many instances, especially in modern works, this is not the case. The very reverse is sometimes found.

CHAPTER III

MUSICAL FORMS IN GENERAL

How Musical Forms are Made and How Distinguished—Sameness and Difference—Varieties of Subject, etc.—Examples.

WE now come to the more direct object of the present study; namely, musical forms considered as complete and distinct specimens of the various designs or plans employed in musical compositions according to their class, their character, and their kind.

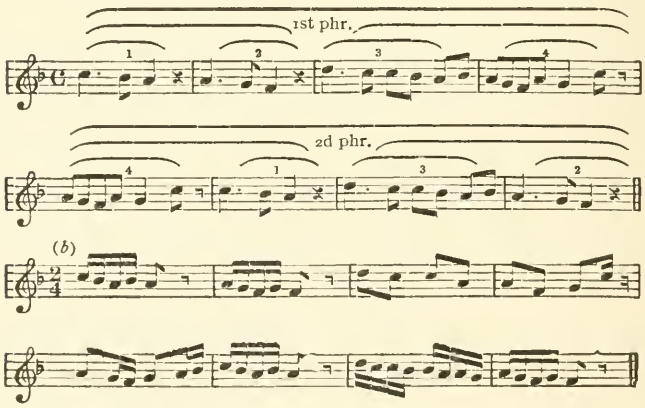
Musical forms are pieced together, so to speak, in many different ways, and it is the order in which this piecing is accomplished, and not the nature of the pieces themselves, that causes one form to differ from another. The elements or ingredients employed, then, are much the same, in their simple nature, in all musical form; and it is only when they come to be compounded that the difference arises. The various pieces just referred to go under certain names, such as figures, phrases, sections, periods, subjects, etc.; all being more or less important, and bearing a certain relationship to each other. It is not our purpose here to describe in detail the different pieces mentioned, nor to explain their individual constitution and their relationship, but to treat and illustrate each musical form

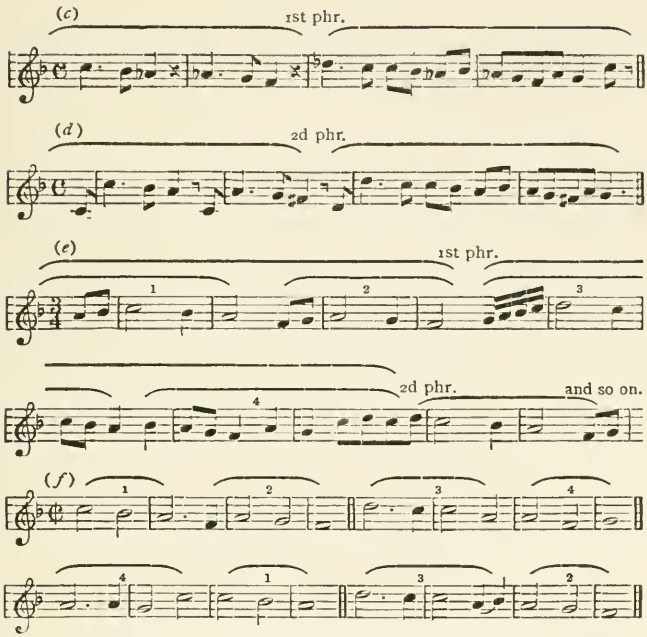
as a whole, and to show, as simply as we can, what constitutes the essential difference between one form and another.

All musical forms have their origin from the same source—from those simple ingredients already mentioned; and so the student will find that in dealing with different forms he is dealing pretty much with the same materials. He will have to observe carefully, then, in what respects they are the same, and also in what respects they are different.

The following illustrations (Ex. V) are intended to show how a few simple pieces may be united so as to form a more extended portion of the music; and also how those small pieces, by some alteration in their progression, or by some other modification, change their relationship and their influence; so that, while they individually retain their identity, yet the whole passage that comprises them assumes a totally different aspect.

Ex. V (*a*)





In the foregoing (Ex. V) at *a*, we have a subject, consisting of eight measures, and divided into two phrases. These phrases are divided into two semi-phrases; and these are again divided into figures. We may remark in passing that subjects are not always divisible in such simple and regular order. We wish, however, to make our purpose plain, and we have therefore adopted a simple example. It will be observed that the figures are the smallest pieces of division. It will further be noticed that the same four figures used in the first phrase are used again in the second phrase in a different order. The result of this rearrangement of the figures is to change the effect

and the purpose of the two phrases. The melodies of these two phrases are appreciably distinct from each other; and the cadences form in the first phrase what is called a half close, and in the second phrase a full close.

At *b* the whole subject given at *a* is, by means of a slight rhythmical alteration in the figures, made to assume a new character. Here again, then, is difference and sameness; and the elements of both are plainly discernible.

At *c* a change of mode is effected, by means of accidentals, from F major to F minor. The figures and semiphrases, however, remain exactly the same in their shape and their order as before.

At *d* a modulation to another key (G minor) takes place, and an introductory note is added to the figures. In other respects the matter is the same as at *a*.

At *e* the time is changed, and the figures are lengthened to two measures; there are also guides or bridges employed—these are the quaver notes leading to and connecting the figures. A considerable change has taken place here on the general nature of the whole section; but there is no difficulty in discovering where the sameness exists.

At *f* a radical change is effected. The whole subject is converted into a hymn-tune; but the lineaments of the music as originally given at *a* are perfectly recognizable.

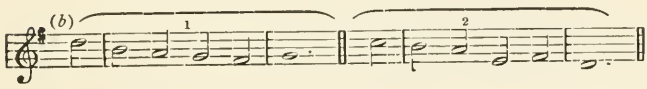
It must not be supposed that we have exhausted the varieties of subject which might be obtained from the four simple figures in the first section, at *a*. Space will not permit more examples than those we have given; but the varieties are practically exhaustless.

This will be obvious, if it be considered that, from four figures, twenty-six different semiphrases may be arranged. This would afford material for about two hundred and seventy different subjects. Then there are the variations of rhythm, which would only be limited by one's power of invention, not to mention the many other means which may be taken—some of which we have shown—to change the general disposition of the subject, without destroying or defacing its constituent elements. Just as this is the case with the smaller pieces—the figures and the phrases—so is it with the larger portions of the music.

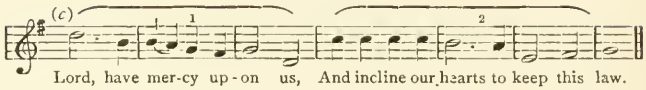
And thus we find that the subjects and the periods are arranged, combined, repeated, interchanged, interwoven, and overlapped, brought into different relationships of key, and mode, and interval, subjected to rhythmical variation, and melodic embellishment, lengthened, curtailed, and otherwise modified, so as to produce the complete movement required for this or that particular musical form. Ex. VI gives a few simple illustrations of the varied treatment which a given subject may undergo in respect of the particular forms for which it may be employed.

Ex. VI First Half of Double Chant.

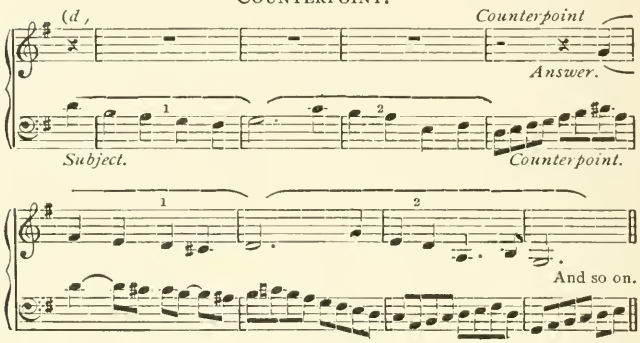
First Half of a Hymn-Tune.—S. M.



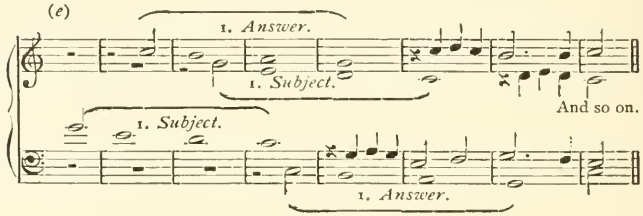
RESPONSE.



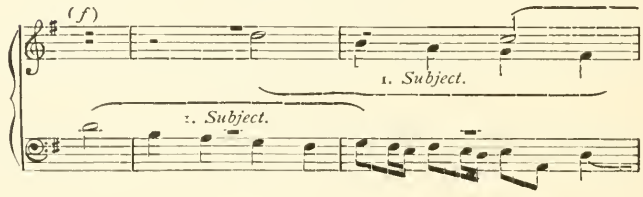
EXPOSITION OF A FUGUE—SUBJECT AND ANSWER WITH COUNTERPOINT.

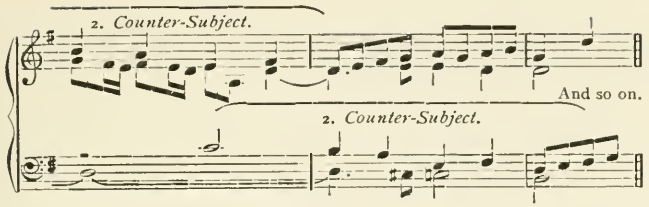


STRETTO OF A FUGUE.

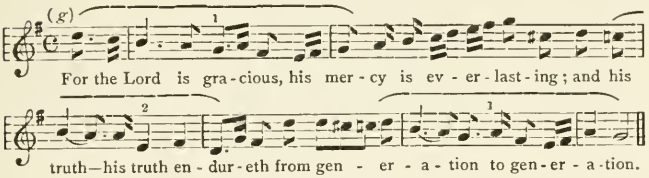


STRETTO OF A FUGUE WITH SUBJECT AND COUNTER-SUBJECT.

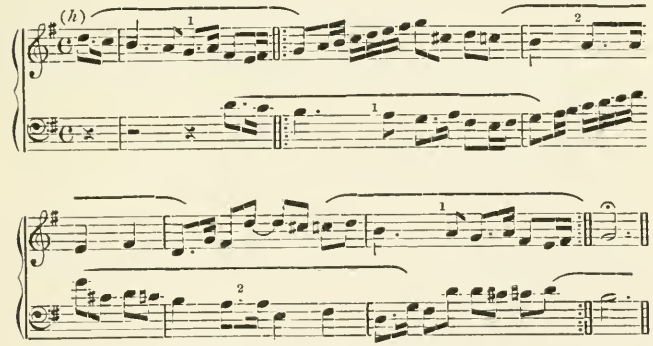




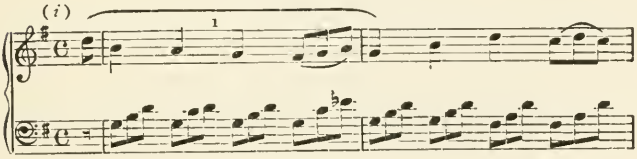
SACRED SOLO.

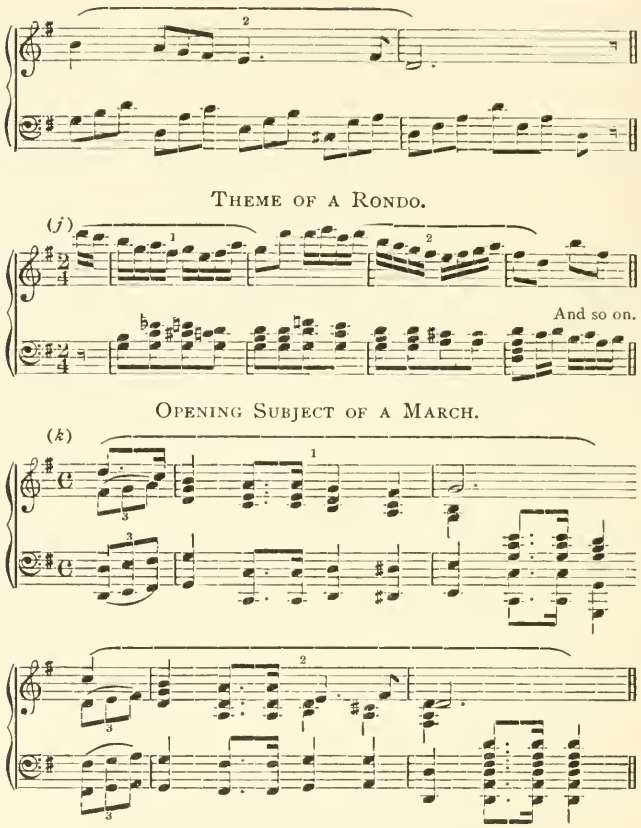


AN ENDLESS CANON.



THEME OF A SONATA.





These illustrations (Ex. VI) are all portions of various musical forms which will be found to be fully explained in the proper place. Here we have only to point out that in the examples before us there is a most obvious and conspicuous difference, yet in every case the same subject is used with unmistakable distinctness.

At *a* the subject is shown as the first half of a double chant, ending with a half close. It will be noticed that the two sections, while both having an equal number of notes, are not alike in actual length.

At *b*, to suit the measure of the hymn, the two sections are necessarily made equal.

At *c* there is a breaking up of some of the notes to meet the requirements of the words; and (this being a complete sentence) the second section is made to finish with a full close.

At *d* the length of the notes—the time—has undergone some change, but the tune remains substantially the same. The two sections comprise what is called the subject of the fugue; and their repetition in the key of the dominant (which takes place at the fifth measure) constitutes what is called the answer. The answer may require a slight modification of the subject that precedes it, which it does here.

At *e* the first section of the original example only is taken, and even that is a little curtailed. Here the answer looks more like the second section of the original example; but it is not intended as such—it is the first section having its first interval altered from a third to a second, which is sometimes necessary in the answer.

At *f* we have both of the original sections introduced, each being worked in double.

At *g* the subject is considerably elaborated by melodic embellishment; and at *h* this ornamental arrangement is employed in canonic fashion. The student will easily make out the original sections, notwithstanding their heavy decoration.

At *i* the same subject appears as the theme of a

sonata; at *j* as a rondo theme; and at *k* it is treated in march fashion.

By careful examination of these examples the student will see that, while in every case the difference is broadly apparent, yet the element of sameness is by no means difficult of apprehension.

Experience has taught that in the vast majority of cases young students have much less difficulty in discovering the difference in two pieces of music than in perceiving the sameness that may be found in them. Indeed the similarity that often exists among the figures and the phrases is seldom perceived unless it be made glaringly prominent.

Let the student, then, seek to cultivate perception of similarity, which, for this branch of the subject at least, is of supreme importance. In this way he will be enabled to trace elements having sameness, under every sort of modification, through all the labyrinth of tangled rhythm and figurated melody, through all the complications of key-changes and the ramifications of the various constitutional methods so frequently referred to here.

We have seen, by examples just given, that things which are essentially different may yet contain a strong element of similarity. Without a clear perception of this often half-hidden element, the student can never thoroughly appreciate the intrinsic beauty of the higher musical forms.

CHAPTER IV

SIMPLE SACRED AND SECULAR FORMS

Amen—Chant—Versicles and Responses—Psalm-tune—Hymn-tune—Song—Duet—Trio—Quartet—Recitative—Air, or Aria—Chorus—Examples.

Amen

TO claim for the Amen a place among definite musical forms may appear to be descending to triviality. Be this as it may, the Amen either has an individuality of form or it has not. If it has not, then it has no real and recognizable existence. But we know that it has such an existence, we are familiar with its effect, we perceive its object, and we can describe its constitution; so, it is really a something—it has an existence of its own. At first sight it may appear that the Amen is only useful as a kind of coda, a sort of not altogether necessary appendage to what has preceded it; nevertheless, it is frequently used by itself after spoken sentences, and there it stands as a solitary musical passage. In this way it assumes a complete musical form, of independent existence and recognizable nature.

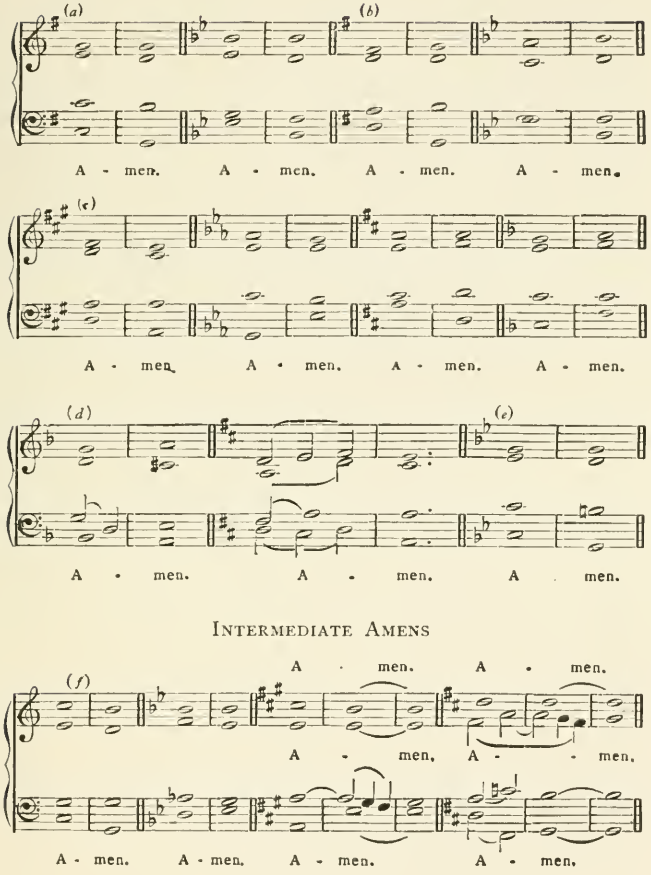
The Amen is a mere cadence. In its most popular treatment it consists of but two chords, those of the subdominant and tonic (Ex. VII-*a*). This progression is called a plagal cadence; and it is the favorite

device for the Amen, beyond all others, because of its peculiarly solemn and soothing character. Another somewhat common progression for the Amen is what is called the authentic cadence (Ex. VII-*b*). These are both called perfect cadences, and are usually employed as final Amens—that is, after the last of a series of prayers, or at the end of a hymn. Less complete varieties of the perfect cadences are occasionally employed as final Amens with more or less complete effects (Ex. VII-*c*). Even an imperfect cadence is sometimes to be met with as a final Amen, especially in the minor mode (Ex. VII-*d*). In the minor it is not uncommon for the tierce de picardie* to be used in the Amen (Ex. VII-*e*). Elsewhere than as final Amens, imperfect cadences are often employed, as, for instance, for the sake of variety, after prayers other than the last of a series, and also at the end of anthems or choruses that finish with an amen repeated two or three times (Ex. VII-*f*).

In numerous cases, of course, the word Amen is frequently made use of as a peg to hang a deal of music on, so to speak; and in finishing the Gloria Patri of a service,† or at the conclusion of an anthem, it may occupy many measures. The word Amen has been used as the sole verbal theme of very extensive movements, receiving elaborate canonic and fugal treatment, as in Handel's Amen Chorus. All such examples, however, must be considered according to their own special merits, and cannot be included in the present classification. The Amen, as a distinguishable form, is simply a cadence and nothing more.

* Finishing with the tonic chord having a major instead of a minor third.
† A canticle of the Episcopal Church with an elaborate musical setting.

Ex. VII



Chant

The Chant is more or less a combination of measured and unmeasured music: that is to say, while one portion of it must be performed in a certain rhythmic-

al order, another portion is sung without any fixed succession or relation of accent, and is altogether rhythmless.

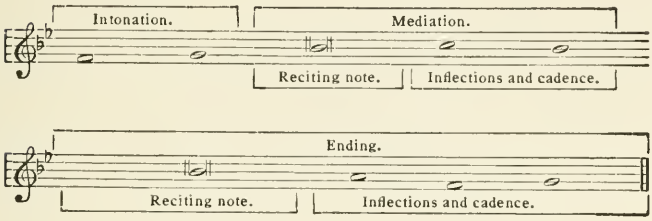
The Gregorian chant is almost entirely without rhythm. If it does possess any rhythmic feeling, it is so vague and so variable that the Gregorian chant might, without much injustice, be said to be altogether lacking in fixed form. Still it has parts or pieces, each having its own purpose, and all occupying distinct relative positions in the chant. The Gregorian chants, called tones,* are eight in number; and each tone has several endings, making in all twenty-six chants, all differing from each other, not only in regard to the character of their melody, but also in respect of their length. The only thing of a formal kind by which similarity may be recognized in the different chants is the relative positions of their several pieces already referred to. In Ex. VIII two Gregorian chants are given. At the time when this kind of music was in its glory, previous to the Reformation, musical notation was very different from what it is now. It was written on a staff of four lines. Sharps and flats were not employed (excepting an occasional B♭). The notes were—a square black note with a stem at one side; a square black note without a stem; and a diamond-shaped black note. These were the long, the medium, and the short notes in use. There were no bar lines employed. In some churches of certain denominations, where ancient Church tunes are held in high esteem and reverence, the Gregorian tones noted in the old manner are in constant use at the present

* The word tone as used here must not be confounded with tone, an interval. It must be held to mean simply a mode or tune.

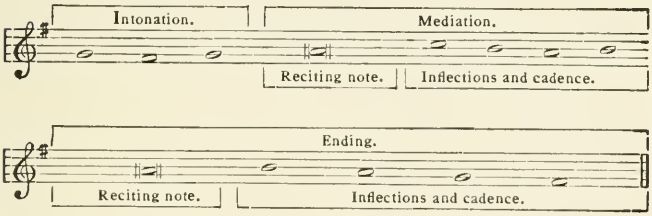
day. But as comparatively few could be expected to be familiar with that antiquated method of notation, we have given the illustration (Ex. VIII) in modern characters.

Ex. VIII

(*a*) *2d Tone*



(*b*) *7th Tone, 5th ending*



From the above (Ex. VIII), it will be seen that the Gregorian chant consists of three principal pieces —the intonation, the mediation, and the ending. Both of the latter two pieces contain a reciting note and inflected* notes, and end with a cadence. We see, however, that as the three characteristic pieces vary considerably in different chants, there cannot possibly be any fixed rhythmical proportion in music of this

* Inflected simply means rising or falling, in contradistinction to the reciting note which stands still on the one degree of the staff.

description. The absence of bar lines may cause some doubt as to where the accent should fall, or as to whether there be any accent at all. There is accent in Gregorian chants, but of a very irregular character, and depending very much upon the words to which the music is sung. In passing from one part of the chant to another there is always an accent. For example, in passing from the intonation there is an accent on the first syllable of the reciting note: any number of syllables may be sung to this note, according to the length of the verse; and in passing to the first inflected note there is another accent. The inflected notes themselves are accented according to their number, and as the words may demand.

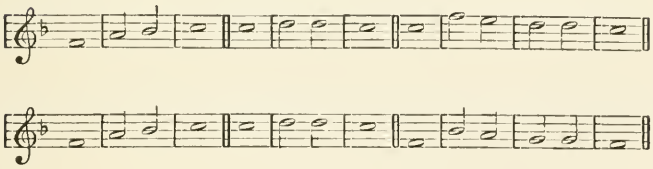
We now come to the more commonly known Anglican chant. For a considerable time before the Anglican chant, in its present fixed form, came to be established, there had been a gradual molding and modifying of some of the Gregorian tones into a more modern and fixed form. It might be safe to say that the Anglican chant came into use with the Reformation. It did not, however, supersede the Gregorian chant for some time after the period—if indeed it can be said to have done so entirely yet. At all events, Anglican chants, or, to be more precise, the Anglican chant form, is now much more extensively employed than the Gregorian, and probably has been for the last two hundred years at least. Its popularity is not to be wondered at, seeing that it is more melodious and pleasing to the ordinary ear than its predecessor, while its fixed and unchanging form makes it much more readily appreciated, and renders it more suitable for congregational purposes. Of course, admirers of the Gre-

gorian tones hold the very reverse to be the case; and, from their point of view, we are not disposed to quarrel with them. But admirers of the Gregorian tones are comparatively few, so that the Anglican chant is of the greater benefit to the larger number.

The Anglican chant is of two ordinary kinds—the single chant and the double chant; the only difference between them is that a double chant is just like two single chants joined in succession. A single chant is sung to one verse of the Psalms; a double chant takes in two verses. Quadruple chants have even occasionally been tried (these, of course, will include four successive verses); but their length is apt to lead to some confusion: at all events, they are not popular.

It has been supposed that the Anglican chant took its form from the old common-measure psalm-tune, which, unlike our common meter of to-day, consisted of two short lines of fours, one of six, two of fours, and one of six, with a long note at the beginning and the end of each line, thus (Ex. IX):

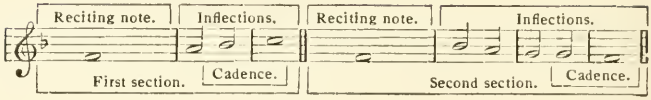
Ex. IX



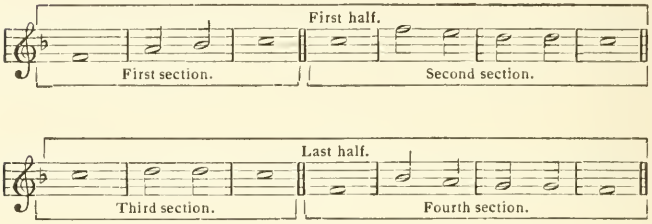
Here, then, is a tune of six sections, of which, if we take the first and the last, we have a single chant (Ex. X-*a*); or, taking any two short sections, and the two long sections, we have a double chant (Ex. X-*b*).

Ex. X

(*a*) *Anglican chant, single*



(*b*) *Anglican chant, double*



Each section of the chant corresponds to half a verse of the psalm. Each section begins with a reciting note and ends with a cadence. To the reciting note so many syllables are monotoned* from one up to any number, according to the length of the half-verse. Speaking roughly, the last three syllables in the first half of the verse, and the last five in the second half, are left for the inflected notes. Frequently, however, an alteration of this arrangement is required, according to the sense and the expression of the words.

It will be easily observed that the sections of the chant are not equal—one contains three measures and the next four. There is thus apparently a want of balance, which it might be thought would displease the ear. But in listening to a chant there is no effect of lopsidedness experienced—the balance of the sections

* Sung on one sound, or one tone.

seems to be quite perfect. This may be owing to the influence of the reciting notes, which, by their being lengthened indefinitely and irregularly, throw the ear out of calculation; or it may be that the one reciting note running into the other deceives the listener, who mentally ekes out the short section with a note from the long one; and that equal balancing of the pieces in a composition for which the mind always craves is attained.

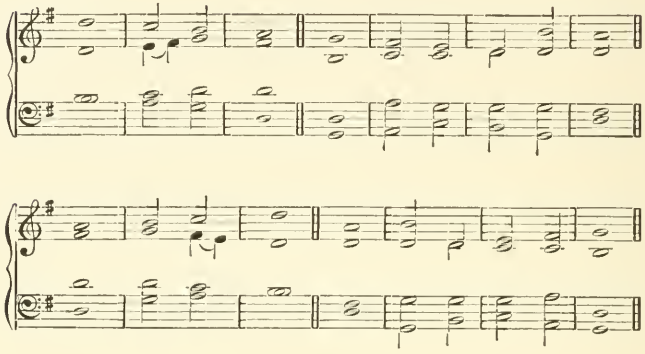
The chief points of similarity between the Gregorian and the Anglican chant are: first (and most distinctly), the reciting note; secondly, the inflections, which, however, have not fixed succession in the former, while in the latter they have.

There are other modern chant forms to be met with; namely, what are sometimes called metrical chants. The most familiar of these is, perhaps, Troyte's chant, frequently sung to the hymn "Abide with me." But metrical chanting is something of a misnomer, or a paradox. Chanting must contain some element of unmeasured recitation—this is its characteristic feature. In singing a chant to metrical words in which all the verses are alike, there must be pretty much the same recurring measurement in every verse; so that the varied recitation, for which a chant is specially intended, cannot take place. A metrical chant then is simply a peculiar form of psalm-tune.

Many Anglican chants display much originality of invention. In this respect the famous double chant of Dr. Crotch claims precedence (see Ex. XI). The music in the two sections of the first half of this chant is repeated backward, note for note in all the parts, in the corresponding sections of the last half. This style

of composition is termed *per recte et retro,* which simply means that it may be taken through the right way or backward.

Ex. XI

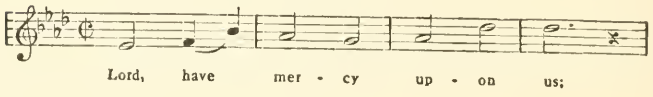


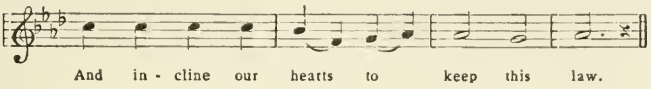
Versicles and Responses

These are sentences of various lengths occurring at certain parts of the Church Liturgy. They may be set either in a semichanting style, or in a more ornamental and measured form. The oldest, and perhaps the best for their purpose, are of the former kind. Among the more modern are to be found adaptations from larger works, such as the following, from Mendelssohn's "Elijah" (Ex. XII):

Ex. XII

Response after the Commandments—Church of England Service





Psalm-tune

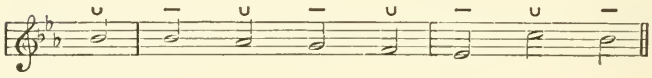
The psalm-tune may really be said to have originated with the Reformation. Of course there were tunes of a somewhat similar kind in use long before that, but they were, as a rule, of a Gregorian character, whereas the psalm-tune is of a more modern tonality, and more popular in its nature. It is beyond every other form of music the simplest, and therefore the most congregational—for which use it was specially intended. This arises from three causes: (1) the slowness of its movement; (2) its syllabic progression; (3) the regular measurement of its phrases, which correspond to the four lines of a metrical psalm.

The psalm-tune is generally written in half-note time —$\frac{3}{2}$ or $\frac{4}{2}$. Several years ago $\frac{2}{2}$ was largely used, but this in most cases has now been discarded. As the psalm-tune is intended to be sung slowly, and by large masses of the people, it can scarcely be said to have any particular rhythm in its performance, as the slow and ponderous delivery of each note is apt to make the accents appear to be all of one kind. Further, the syllabic nature of the music rather tends to destroy the accent, especially when the speed is slow. Of course, in tunes written in triple time an occasional syllable has two notes sung to it; and here, perhaps, there is a stronger rhythmic feeling than elsewhere. There are three principal meters or measures in psalm-tune music —long meter, common meter, and short meter. In

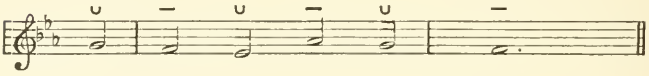
long-meter tunes there are eight pulses in every phrase, corresponding to the eight syllables in every line of words. In common-meter tunes there are eight pulses in the first and third phrases and six in the second and fourth. In short-meter tunes there are six pulses in the first, second, and fourth phrases, and eight in the third. But whether the meter be long, common, or short, the musical phrases in every line of all the three varieties are mostly the same in length. This is necessary for the sake of rhythmical balance, and is accomplished by finishing the short phrases by means of longer notes, as the following selected from the three different meters will show (Ex. XIII):

Ex. XIII

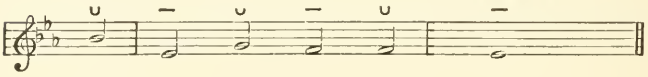
L.M. *Melcombe*, 1st line



C.M. *St. Peter*, 2d line



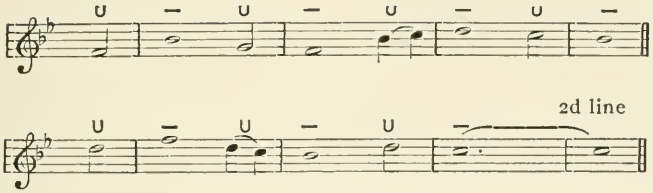
S.M. *Franconia*, 4th line



When the psalm-tune is written in triple time, the lengthening of the short phrases never appears in the music; so that really the rhythm seems to want balance. In a triple-rhythm common-meter tune the second line would require to be lengthened as here shown (so would the fourth, of course), Ex. XIV:

Ex. XIV

C.M. *Martyrdom*, 1st line



But this, if the tune were sung slowly, might be considered to be too long; if it were performed quickly, it would be found to be all right. Be this as it may, there is always, or should be, a pause made at the end of the second and fourth phrases of a triple-measure psalm-tune. The harmonies of the psalm-tune are usually simple, and generally diatonic. Modulation, particularly to the dominant key, is much employed, but chromatic accidentals almost never in this kind of composition.

Chorale is the name given to the psalm-tune form in Germany; and many of our best tunes are from German sources.

Hymn-tune

This might almost be included under the previous heading, but seeing that modern hymn-tunes differ considerably in their style from our sixteenth-century psalm-tunes, a special word is due to this rather more elaborate form of simple music. The modern hymn-tune, we might almost say (if there is to be any distinction drawn between sacred and secular music), is less sacred in its character than its predecessor. The hymn-tune is more ornamental, being seldom syllabic,

and its harmonies are of a more sensational kind. Remote modulations and chromatic harmony are freely and often effectively employed in the hymn-tune. The kinds of meter to be met with are of every conceivable variety. As a general rule, however, the phrases are of a uniform length, according to their kind. At the same time, several notable exceptions to this rule are to be met with. Many of our hymn-tunes display much musical skill, and afford scope for artistic performance. A list of hymn-tune writers would embrace the names of the foremost composers of the present day and of recent times.

Song

The song is a single melody for poetical verses, and intended to be sung with or without accompaniment. The song is the most popular of all musical forms. In its simplest state it contains a strong element of sameness among its phrases, and its rhythm is regular and clearly defined. Thus a simple song form is quickly learned and easily remembered. National songs illustrate this in a more marked degree than the productions of a scholastic age, and of advanced musical thought. The song form should contain an independent beauty of its own, without absolutely requiring the aid of instrumental accompaniment. It should also be in strict sympathy with the words for which it is written, presenting a general impression of the whole sentiment of the poetry, rather than giving prominence to any outstanding feature. The production of a song depends more upon pure melodic feeling and true poetic appreciation than upon the comprehension and

application of abstruse musical principles. A good song need not present any technical difficulty, and many that have been long cherished, and still live to be admired (while others more artistically contrived have passed away), were written by men who occupied but humble places in the scale of musical greatness.

Properly speaking, the song form should be repeated entire to a number of different verses. In past times this was the case, but in our modern songs this simple arrangement seems no longer to be adhered to. Whether it be that all the attractiveness and beauty of melody *as* melody have been used up, and composers are now forced to introduce some peculiar and novel devices instead, we do not here say. Neither are we saying anything against this modern song form, as music. We are simply stating a fact; namely, that the song form of the past contained only a few simple phrases, but they were, and are still found to be, sufficient to attract and captivate the listener; whereas the song form of the present day seems to contain much that will hardly bear repetition, because in our modern songs we are treated to a succession of changing and strongly contrasted effects (often produced by the accompaniment, while the vocal part is a mere nonentity), somewhat analogous to a series of dissolving views, each obliterating the impression of the other.

Duet

The duet is intended to be sung by two single voices. It may take the simple song form, and be sung throughout in two parts; or one voice may sing a portion and the other follow with another portion; at other times

both voices may sing the same part. All these three methods may be used in any kind of duet, no matter whether it be simple or ornate, but none may be used continuously from beginning to end except the first.

Trio

The trio is intended to be sung by three single voices. Male-voice trios were very popular with English glee-writers at the end of the eighteenth century and the beginning of the nineteenth. At the present day trios for female voices are more common. These, however, are in many cases wrongly named—when intended for class use, they should be called three-part songs.

Quartet

The quartet is usually written for four single voices. Sometimes a double quartet is met with, as in Mendelssohn's "For he shall give his angels," in "Elijah." A quartet in which each of the parts is sung by two voices to strengthen the music is sometimes called a double quartet; but it is wrong to name it so.

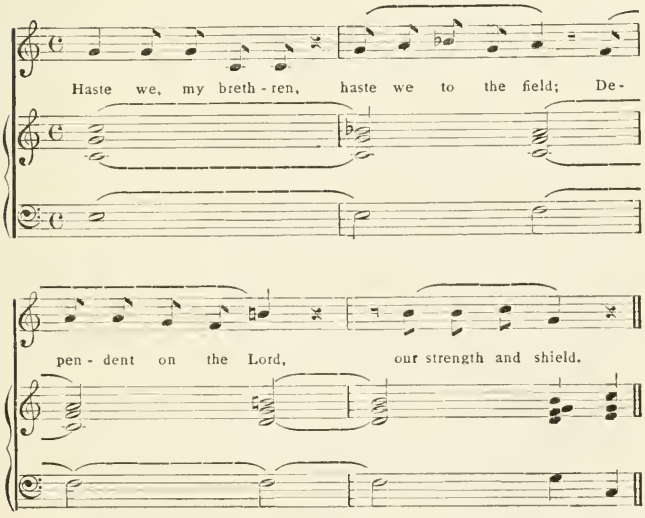
Recitative

This is a kind of musical declamation. It is an attempt, as far as possible, to imitate spoken words by means of musical sounds. Although this cannot be exactly done, still there is in recitative a musical effect produced which we cannot call melody, as it wants melodic connection, both as regards its tone-succession

and rhythmic construction. The short jerky figures of which recitative is made up are of a very conventional character. These figures have become common property; indeed, they have been appropriated as such, almost since recitative was first used, more than three hundred years ago. Nothing in music has changed its form, perhaps, so little as recitative. This proves the fitness of the material adopted to the purposes for which it was first selected. If we examine a few recitatives of different composers we may be struck—if we have not before observed it—not only with the similarity of the music, but with the absolute identity of many of the figures. Here is an example from Handel's "Judas Maccabæus" which contains, out of four figures, three that are exceedingly common:

Ex. XV

HANDEL



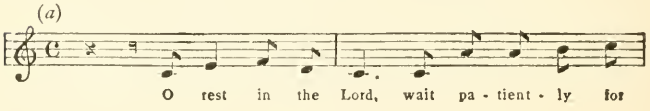
The figures referred to are marked off in the above by means of curved lines, and, note for note, they may be easily found in other works of a similar nature. The accompaniment to the recitative is so designed as to allow the singer a deal of liberty in the performance of the music. The length of the notes need not be rigidly adhered to, and the pitch may in some cases even be altered, so long as an expressive rendering be given to the passage.

Air, or Aria

This form is a melody or solo occurring in a high-class work, such as an oratorio or an opera, and is always intended to be sung by the particular kind of voice for which it is written. The aria is frequently found to consist of a principal theme, a secondary theme, and a da capo—finishing with the principal theme. Numerous examples of this form are to be found. Sometimes the words da capo are used after the second theme, and the principal theme is sung over again just as at first. We also find, in some cases, that the principal theme appears again, after the second theme, in a slightly altered form. Of the former of these methods, Handel's works supply a large number of illustrations; of the second method, Mendelssohn's aria "O rest in the Lord" affords a good example. (See Ex. XVI.)

Ex. XVI

Opening, or Principal Theme



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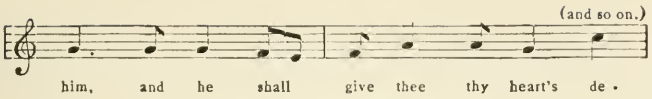
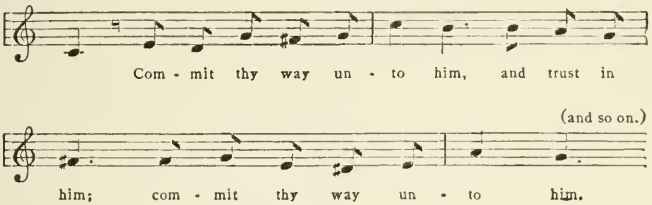
FRAU MUSIKA (DAME MUSIC)
From the Painting by G. Naujok



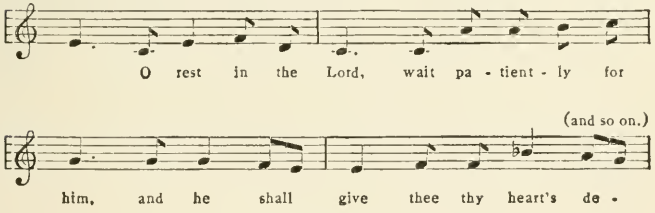
SECONDARY THEME, BEGINNING AT THE 11TH MEASURE

(*b*)



RETURN OF PRINCIPAL THEME SLIGHTLY ALTERED, 20TH MEASURE

(*c*)



The aria, then, according to the above treatment, is simply a development or artistic working out of the idea contained in the simple song form, so well illustrated in many national melodies. When this structure is found to be very highly developed with preludes to each of the themes, it goes under the name of a grand aria. In modern times the grand aria has often assumed great scope and splendor.

Chorus

We have placed the chorus among simple forms, seeing that it is really a single portion of some larger work. At the same time, the chorus may contain several different movements. The chorus is intended for a large number of voices—that is, in fact, its essential explanation. It may be of any form—in unison, or concerted in two, three, or any number of parts. Monotone, recitative, chant, chorale, harmony, counterpoint, canon, and fugue may all be employed in the chorus, in any order or selection. Double choruses are also used. In these the body of singers is divided into two smaller choruses, the one responding to the other, and both coming together only at intervals.

CHAPTER V

COMPOUND SACRED FORMS

Anthem—Service—Mass—Oratorio, the Largest of Compound Sacred Forms—Examples.

Anthem

THE anthem (in common with the other forms mentioned in this chapter) may be called a compound form, because it may embrace several simple forms, such as some of those we have already described. Of course all anthems are not compound, but we cannot here draw such a fine distinction as to make a classification.

The anthem had its origin in the English Church. It was introduced to help to fill the gap caused by the loss of the mass music. The anthem was, and is still more or less, designed for choir performance. Of course it is quite practicable for congregations to join in some of the simplest anthems, which are not more than extended hymn-tunes; but we cannot expect the higher-class anthems to be taken part in by people with only an ordinary musical capacity, and with no previous rehearsal, while the proper rendering of such compositions may demand special musical qualifications, with close and assiduous practice.

The words of the anthem are usually a Scripture text; sometimes, however, we find a Church collect or a verse or two of a hymn employed. As far as

musical treatment is concerned, the anthem occupies a wide and almost unrestricted field.

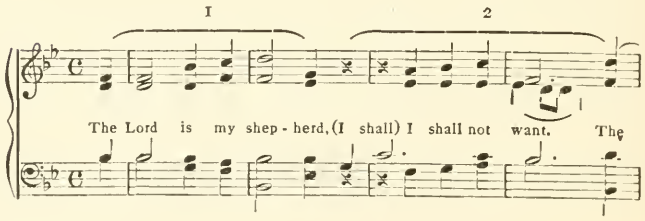
The full anthem is meant to be sung throughout by the whole choir. It may be a very simple composition, in plain four-part harmony, without broken time or separate entries for the different parts; or it may be of an advanced nature, in five, six, or more parts, containing several different movements, and dealing with the deep resources of counterpoint and fugue; with obbligato accompaniment for organ or full orchestra.

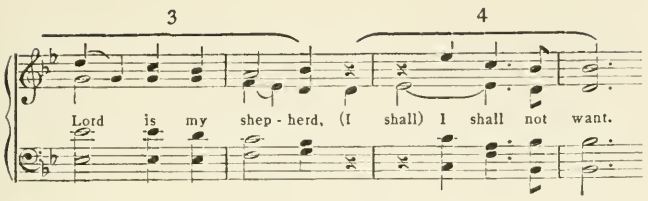
The verse anthem contains movements for single voices, called verse parts, or solo, duet, trio, or quartet, any or all of which may be used in the one anthem, besides the full chorus movements, which are generally at the beginning and the end.

Compared with the squarely measured psalm or hymn tune, the anthem is often complicated in this progression of its parts; and this very fact releases the different phrases from that rigidly uniform measurement which simpler forms admit of. Still the phrases and other pieces are as measurable in the one case as they are in the other. Here is a similar illustration (Ex. XVII):

Ex. XVII

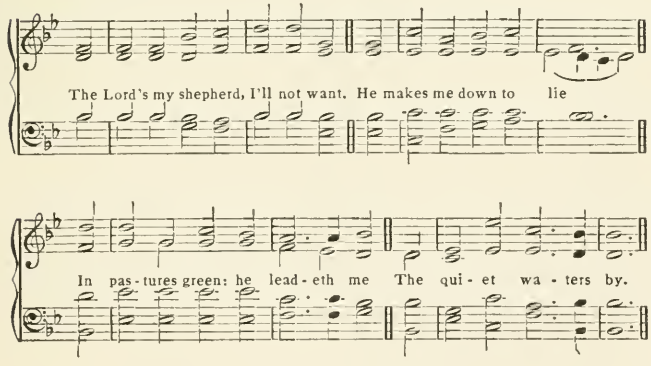
G. A. MACFARREN





In the above (Ex. XVII) the phrases are as recognizable as in a psalm-tune. Where the quarter rests occur, the phrases are connected by a single voice part, but even were there neither vocal nor instrumental connection here, the balance of the rhythm would be in nowise disturbed. Now this illustration may be said to be a psalm-tune a little more highly developed. See how simply it may be reduced to a primitive form (Ex. XVIII):

Ex. XVIII



The above (Ex. XVIII) will speak for itself. The rest of the music in this anthem, and that of other anthems of a similar kind, may easily be treated in

the same way as the above extract. This will help to show us the difference and the sameness to be found in two separate forms. It will also help to support what was said at the beginning of Chapter III—that it was not the nature of the pieces themselves so much as the manner in which the piecing was accomplished, that caused one form to differ from another.

Service

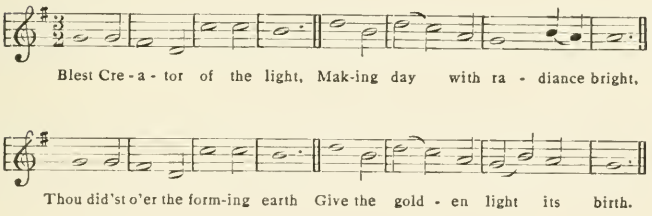
This is a musical setting of the Canticles and other portions of the Liturgy. The treatment is much the same as in the preceding form; indeed, it could not be distinguished musically from that of the Anthem. In regard to the words employed, there may be less freedom permitted in the present case, so far as selection goes. In the anthem the Scripture text may be chosen from other than successive verses; even different chapters or different books may be drawn upon to furnish a suitable verbal theme. In the service, however, the words are taken as they occur in the Prayer-Book without omission or curtailment.

Mass

The mass is the principal part of the service in the Roman Catholic Church. It affords great opportunity for musical display, and many of the great composers devoted their attention to it. The text of the mass consists of several definite portions, such as the Kyrie, Gloria, Benedictus, Agnus Dei, and so on, each of which presents an opportunity for special musical treatment. Choruses, harmonic or contrapuntal, solos, duets, and other single-voice combinations, are em-

ployed according to the feeling and taste of the composer. The mass is generally written for orchestral accompaniment. It is specially intended for Church use, but it sometimes finds its way into the concert-room, where it loses much of its grandeur from the want of its natural surroundings. And yet the mass, with its rich and fascinating beauty, is made up of the same simple material that hymn-tunes are composed of. Indeed several hymn-tunes have been adapted, note for note, from the masses. Here is one which consists of the principal theme in the Kyrie of Mozart's Twelfth mass. It was popular many years ago, at a time when hymn-tunes and hymn-tune writers were less plentiful than they are now (Ex. XIX).

Ex. XIX



Oratorio

The oratorio is the largest and most popular of compound sacred forms. It is the composer's *ne plus ultra,* and the copestone of musical art. The most sublime ideas of the greatest musical geniuses have found expression in oratorio. It is a more gigantic and more comprehensive work than the mass. Being intended for public performance, it admits of, and even demands, a more powerful rendering than the mass; and

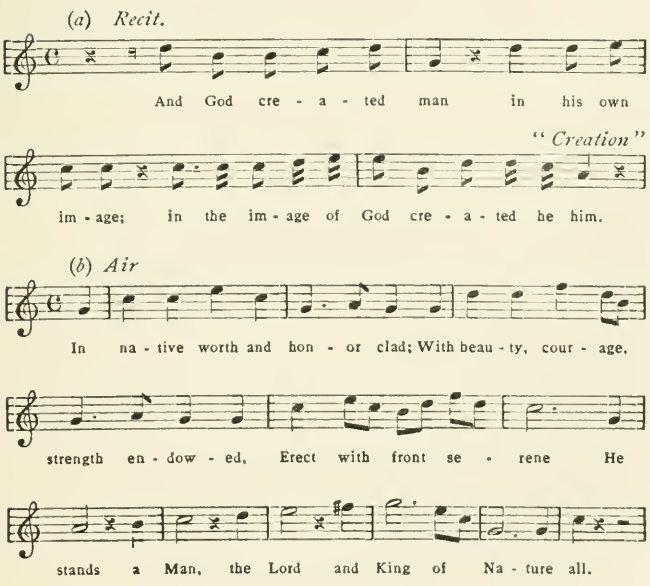
it embraces among its numbers almost every possible musical device.

The text of the oratorio is of two kinds—epic and dramatic. In the first, the vocalists do not represent any characters connected with, or spoken of, in the libretto. They are simply narrators, who give a musical exposition of the story or the poem, as the case may be. Handel's "Messiah" is the best-known example of this class. In the dramatic oratorio all the vocalists impersonate particular characters, as in Handel's "Samson" and others. Sometimes we find both the epic and the dramatic combined, as in Mendelssohn's "St. Paul" and "Elijah." Possibly the dramatic element predominates among the standard oratorios; so that an oratorio may be safely called a sacred musical drama without scenery, action, or dresses. Among the various musical features of oratorio the chorus figures largely, and as a general rule exhibits the supreme effort of the composer. Here canon and fugue are in their most legitimate place. By these resources, and by the masterly application of them, the oratorio chorus has been raised to a height of excellence and grandeur far above every other form of vocal music.

The general musical plan of the oratorio is as follows: Instrumental introduction or overture, sometimes containing several movements; then follow recitatives, airs (solos for the different voices), duets, trios, etc., and choruses. Along with these may be found interludes and marches of such a nature as the subject may require, the whole being intermixed according to the idea of the composer. The choruses may be written in any suitable form—in simple chorale fashion, in colossal harmonic style (masses of chords

richly and strongly contrasted, or in graceful and flowing counterpoint), the whole finishing with a chorus usually fugal or canonic. The only two simple forms that have anything like a fixed corelative succession are the recitative and the air—the air being usually preceded by a recitative. The words of the recitative in most cases describe briefly the situation, and the words of the air emphasize the same in more extended terms, or intensify the effect of the picture, so to speak, by the application of richer coloring, or express some poetic sentiment in sympathy with the subject—as we find, for instance, in the following from Haydn's "Creation" (Ex. XX *a* and *b*):

Ex. XX



CHAPTER VI

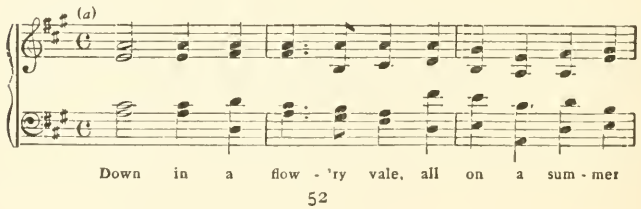
COMPOUND SECULAR FORMS

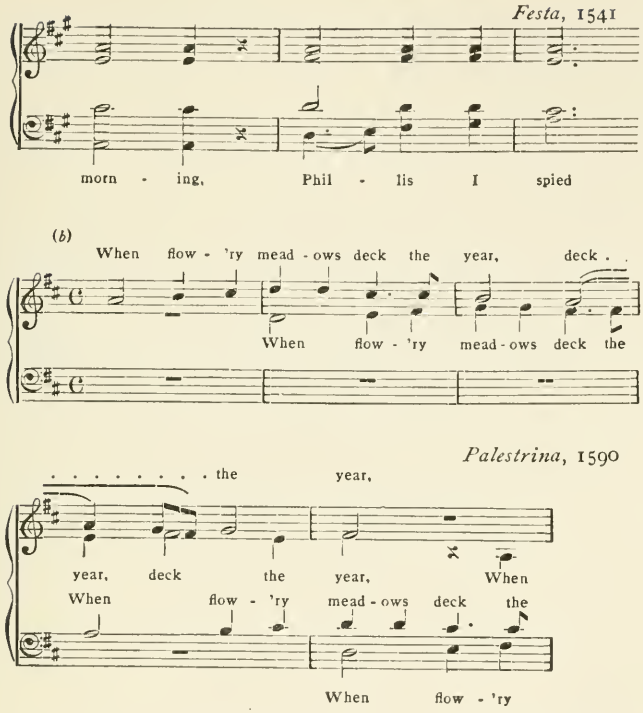
Madrigal—Glee—Part Song—Cantata—Opera: Its General Character and Varieties—Examples.

Madrigal

THE madrigal is the oldest of concerted secular forms; it had its origin about the beginning of the sixteenth century. It might almost have been classed among simple forms; but it is rather too extended in scope, and too complicated in its construction, for such a classification. The character of the music is in no way distinguished from the sacred music of its time, the only difference existing between the two being in the words, which in the madrigal were generally of a secular nature. The madrigal may be called an old-fashioned part song. It contained but one movement, as a rule, which was sometimes sung through to several verses. It was occasionally written in simple counterpoint, but more frequently canonic treatment was largely employed. The following (Ex. XXI) gives a specimen of each:

Ex. XXI





The madrigal was intended for unaccompanied chorus singing.

Glee

The glee was the immediate successor of the madrigal. Doubtless the madrigal supplied the fundamental elements of the glee; but the latter extended its functions considerably beyond the confines of the former. The glee had several distinct movements, including solo work, which was entirely unknown in the madri-

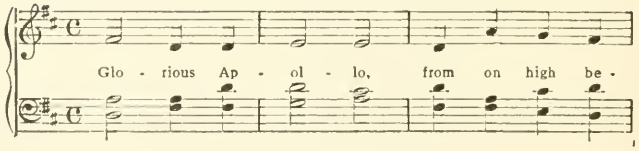
gal. In the glee there were also definite changes of key and time employed, and it included all varieties of subjects, as the following titles will show: "When Winds Breathe Soft," "Chough and Crow," "From Oberon in Fairyland," "Crabbed Age and Youth," "The Red Cross Knight," "Glorious Apollo."

The glee was written for single voices—three, four, or more parts, consequently it could not employ to advantage heavy contrapuntal devices. It required a more melodious treatment, and admitted of more grace and expression in its rendering than the madrigal. The music of the glee was not repeated to different verses.

It may be pointed out that we are dealing with the most prominent characteristics of glees generally. Of course, as with nearly all musical forms, some exceptional cases may be met with, which do not conform to the description here given. For instance, one of the glees mentioned above—"Glorious Apollo"—differs nothing in its form from "Down in a Flow'ry Vale" (Ex. XXI); and were it not for its more modern tonality it might be very well classed with the madrigal mentioned. Ex. XXII gives a short extract from the glee spoken of:

Ex. XXII

GLORIOUS APOLLO—Glee for Three Voices



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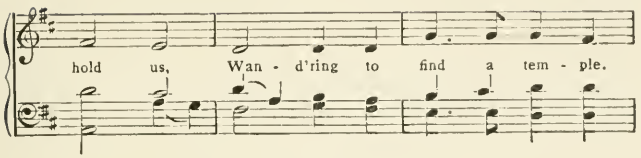
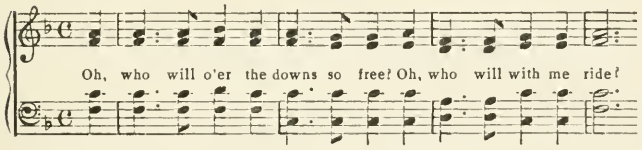


PART SONG

The part song is the latest descendant of the madrigal. In some respects it resembles its progenitor. It has usually but one movement, is intended for a number of voices, and is sometimes repeated to different verses. The chief distinguishing features of the part song are its striking effects—its remote modulations and chordal combinations. These, of course, at once stamp the part song as being the most modern of its class. Still there are some part songs which it would be impossible to separate from the glee or madrigal forms. The following well-known example is of this description (Ex. XXIII):

Ex. XXIII



The foregoing (Ex. XXIII) is every bit as much a madrigal in form as "Down in a Flow'ry Vale."

CANTATA

The cantata is both a sacred and a secular form. We have placed it here, however, as belonging to the lat-

ter, because it was as a secular work that the cantata was first used. The word cantata means simply something to be sung. In its primitive form it consisted merely of a poem or story set to music of a recitative kind, and performed by a single voice accompanied by a single instrument. As time went on an air was introduced to relieve the monotony of the recitative. Later on sacred subjects were treated in cantata form, more voices were employed, and more instruments. Then came the introduction of a number of different movements. When we come to the time of Bach, we find the chorus employed, but generally in a plain and simple manner—in chorale form. The sacred cantata was at that time largely predominant.

The word cantata is now used to designate a work which, but for its limited dimensions, might well be entitled an oratorio, such as "Mary Magdalene" (Stainer), or "The Holy City" (Gaul). The secular cantata is built exactly on the same lines, there being nothing to distinguish it musically from the oratorio form.

Opera

The opera is a dramatic work intended for stage performance. Music, however, is its most important feature. The development of the opera took place side by side with that of the oratorio, and may be said to occupy as high a place among secular forms as the oratorio does among sacred forms. Viewed purely in a musical light, the opera has scarcely, perhaps, the same power or the same emotional influence that the oratorio has, but taking it all in all, it is much the more popular of the two. In proof of this we have only to point to the large number of operas that survive and

to the frequent performance of them compared with the few oratorios that live, and their infrequent performance. This is not difficult to account for. In the first place, it takes a genius of the very highest rank to produce an oratorio that shall survive its first production; therefore oratorios are scarce. In the second place, the opera appeals to a much larger constituency than the oratorio does, because it includes not only music, but scenery, acting, dressing, dancing, and other stage effects. Its powers of attraction are manifold, and therefore the opera is the more in evidence. But, it may be asked, does it not require a genius of the highest rank to compose an opera that would equal the standard oratorios? Yes. But how many operas are there that would stand the test of being sung on a concert platform without the usual stage accessories? Few.

The music of the opera consists of overture, introductions, and *entr'actes,* these being the instrumental portions; recitatives, airs, duets, trios, and other concerted pieces for a number of single voices; ensembles, choruses, and finales. The whole of the material is arranged into acts and into scenes. Of the instrumental portions, the overture occurs at the beginning before the characters appear; the *entr'actes* are introduced between the acts; and the introductions precede the different vocal numbers. The ensemble is the term applied when the characters in a particular scene sing together. The finale occurs at the end of the acts, and is often a piece of complicated and artistic work, consisting of chorus and solos simultaneously performed.

The subject of the opera may be serious, lyric, ro-

mantic, or comic. The accompaniment is always orchestral.

What is called grand opera is sung throughout, there being no spoken dialogue. In opéra comique (French) the dialogue is spoken. In spite of its name, it is not necessary that there should be anything comic in this kind of opera. The real French comic opera is called opera bouffe. In opera buffa (Italian), the dialogue is sung in simple recitative. Operettas are small operas in which the dialogue is spoken, as in the popular works of Gilbert and Sullivan.

In grand opera there are two distinct and well-defined styles employed in the composition—the lyrical and the dramatic. Italian opera is essentially lyrical; sweet, graceful, and captivating melody being the chief aim of the composer, irrespective entirely of the situation, and without regard as to its being in sympathy with the scene or the incident depicted on the stage. German opera is more truly dramatic; the music is made a real part of the scene, and assists the interpretation of the plot by giving expression, meaning, and force to the various circumstances connected with it.

CHAPTER VII

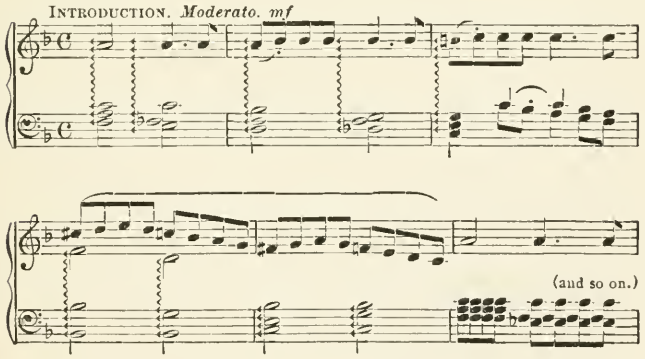
SIMPLE INSTRUMENTAL FORMS

Waltz—Polka—Quadrilles—Schottische—Reel — Strathspey — Hornpipe—Jig— Gavotte — Minuet — Other Forms — Examples.

Waltz

THE waltz is a graceful movement in three-four time. It is generally counted one in the measure. Before the dance begins an introduction occurs, which may be written in any kind of time, but is usually different from that of the waltz proper. The introduction may be of any reasonable length, and of any suitable character. The following might serve for the beginning of an introduction in common time (Ex. XXIV):

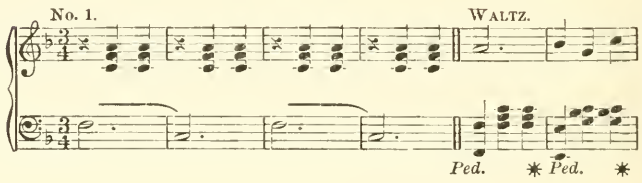
Ex. XXIV



The music of the waltz originally consisted of two sections, each having eight bars in $\frac{3}{4}$ or $\frac{3}{8}$ time. Later several of these 16-bar waltzes were strung together and trios and a coda were added.

The waltz proper usually consists of a number of distinct movements of figures, each containing thirty-two measures, and generally in related keys. Each movement may or may not begin with a few introductory measures. Although the waltz is almost always written in $\frac{3}{4}$ time, a little examination will show that it is actually in $\frac{6}{4}$ time, two measures really forming one, every alternate measure being accented. This, for example (Ex. XXV):

Ex. XXV



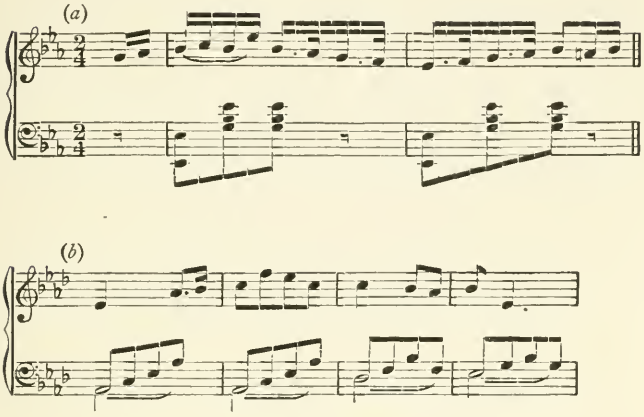
The waltz finishes with a coda, which is usually longer than any of the ordinary movements, and which contains for its principal material the first movement of the waltz elaborated and developed according to taste.

Polka

The polka is of a light and springy nature, and is usually written in two-four time. It contains frequently two distinct movements. The first is of a lively character, with an accompaniment of three eighths, which suits the dance step perfectly (see Ex. XXVI-*a*). The

second movement is commonly in the key of the subdominant, and is more songlike in its character (see Ex. XXVI-*b*):

Ex. XXVI



Each movement has sixteen measures. After the second movement the first is always repeated. The polka has seldom any introduction.

Quadrilles

Quadrilles contain a set of five different movements in related keys. Any kind of ordinary time suits the quadrille, provided the feeling necessary for the particular character of the dance be given to the music. Each movement, or figure, of the quadrille consists of a principal and a secondary subject, with a da capo finishing with the principal subject. Each figure has a few introductory measures.

Schottische

The schottische is not unlike the polka in its musical form. If it has more than one movement there is generally a change of key, but the character of the music remains much the same.

Reel

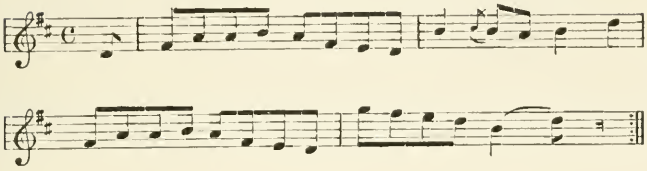
The reel is written in four-four time, and consists mostly of eighth notes. It is a one-movement form, without change of key, consisting of two distinct halves. The first half occupies but four measures, and is repeated before proceeding to the second half. The second half may likewise consist of four measures repeated; it is sometimes found, however, to contain eight measures without repetition, but then the last four measures are simply a repetition of the first four, with a slight alteration of the subject in the two concluding measures.

Strathspey

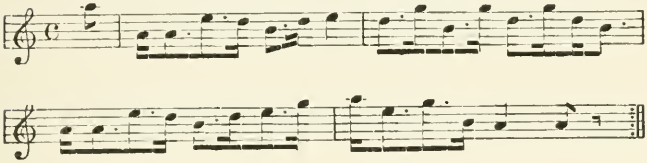
What has just been said regarding the reel form applies pretty much to the strathspey. At the same time there is a marked distinction between these two forms, as the strathspey is written almost entirely in dotted eighths and sixteenths, following each other in succession. This gives the strathspey a jerky and rugged rhythm, and makes the music of a somewhat wilder character than the reel. The two following extracts will plainly show this (Ex. XXVII):

Ex. XXVII

(*a*) 1st half of Reel—"The Wind Shakes the Barley"



(*b*) 1st half of Strathspey—"Miss Drummond of Perth"

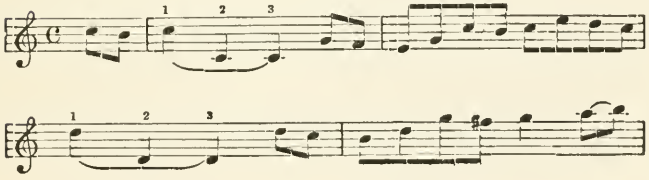


Hornpipe

The hornpipe form is a single movement in two halves of eight measures each, each half being repeated. It is written in four-four time, and is of a cheery character and squarely cut rhythm. One of its most distinctive features is the prominence given, at intervals, to the first three pulses of the measure. This will be noticed in the following extract (Ex. XXVIII):

Ex. XXVIII

First four measures of "Sailor's Hornpipe"



Jig

The jig contains sixteen measures of music divided into two repeated halves. It is usually in six-eight time; and, consisting almost entirely of eighths, it produces a peculiar pattering effect. (See Ex. XXIX.)

Ex. XXIX

First four measures of "Paddy O'Carrol."

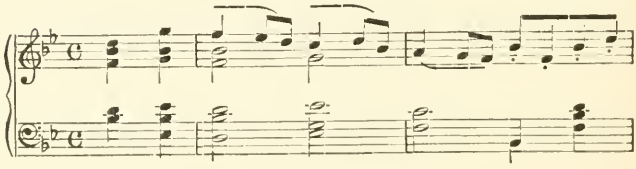
Gavotte

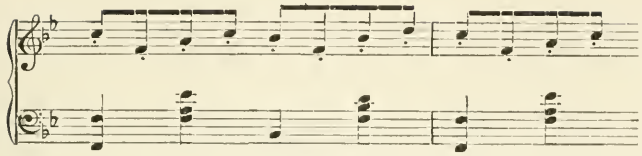
The gavotte, although not popularly known as a dance tune at the present day, demands attention from the fact that it has been raised to the position of a classic, by being selected as a form for composition by many of the great masters. It is written, as a general rule, in four-four time, and begins on the third quarter of the measure. The gavotte is usually long enough to embrace two or three subjects in related keys. It also may contain two distinct movements, and generally ends with its initial subject. The character of the music is always bright, no matter whether the key be major or minor, and has a strong staccato feeling about it. (See Ex. XXX.)

Ex. XXX

First four measures of Gavotte in B♭

Handel



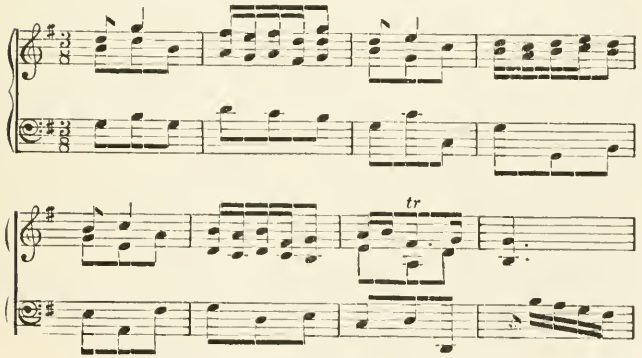


Minuet

The minuet also is antiquated as a dance tune; but as we find it so repeatedly used by the great composers to constitute a movement in some larger work, the minuet must be considered as a familiar musical form. The minuet is written in triple time, and is of a cheerful and stately character. It frequently consists of two distinct movements, the second of which is called the trio, as it was originally intended for three different instruments. The sonatas of Mozart and Beethoven contain numerous examples of the minuet. The following extract is from Handel's overture to "Samson":

Ex. XXXI

Principal Subject in Handel's Minuet from "Samson."



More Obscure Forms of Dance Tunes

Under this head we may mention the allemande, the bourrée, the courante, the sarabande, the chaconne, the gigue, and the loure. Of these the first two were written in common time, the next three in triple time, and the last two in twelve-eight or six-eight time. These dance forms supplied a large amount of melodic figure and rhythmic design, which the older composers were not slow to take advantage of. Corelli, Purcell, Handel, Bach, and others produced many examples of the above forms. A favorite device of these writers was to unite several of these old dances in a series which was called a suite. The suite, however, is a compound form, and is mentioned further on in its proper place.

CHAPTER VIII

MORE EXTENDED INSTRUMENTAL FORMS

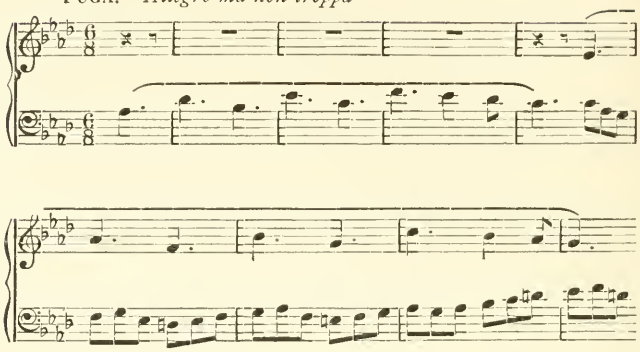
Capriccio—Fantasia—Extravaganza—Potpourri — Scherzo — Rondo—March—Examples.

Capriccio

THIS may either be entirely original, or it may consist of themes taken from some other composition. The treatment of the capriccio, or caprice, assumes no fixed form or style, the composer being free to turn and twist and caper with his subject or his themes, as he may feel inclined. In some cases he may, if he think fit, in an unfettered manner approach the style of some fixed form, such as the sonata movement, the rondo, or even the fugue. In other cases there may be no resemblance to any definite form. Of course there must always be cohesion and relationship among the passages of the capriccio, no matter what peculiarities or eccentricities be indulged in. The capriccio is always of a light and animated nature. It might therefore be considered unsuitable for fugal treatment. Of course, in such a case, the greatest freedom is allowed in regard to the ordinary rules of fugue writing. As an illustration of this, the second movement of Beethoven's sonata in A♭ major, Op. 110, affords a good example (Ex. XXXII):

Ex. XXXII

FUGA. *Allegro ma non troppa*



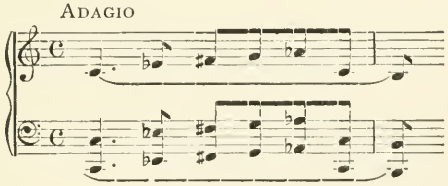
This shows the nature of the subject and answer, and also the counterpoint employed. This counterpoint goes on unremittingly to the end: now and again the subject appears in various keys, but it is not always regularly answered, and some very interesting canonic imitation takes place in the counterpoint. At the forty-eighth measure the subject appears in the bass, in octaves strikingly and characteristically altered. Twenty measures farther on there is some appearance of a stretto, but it is not carried out. A little farther, we come to a short pedal, and almost immediately following the original subject appears in the bass. After a few chords, and one or two straggling arpeggios, the arioso dolento that preceded the fuga comes in again, embellished and slightly modified, in the key of G minor. After the arioso a few staccato tonic chords in the major key of G introduce us once more to the subject of the fuga in that same key. This time, however, the subject is inverted: it is answered, in the key of the dominant. It is given out again slightly cur-

tailed in the tonic key, and answered, still more curtailed, in the key of C minor. Then the principal figure of the subject appears in the key of G minor. Here every note is syncopated, and the accompanying parts imitate each other in canonic figures. The whole subject then appears in the bass, in octaves, but still syncopated. After this, the music changes to meno allegro, and the fugue subject is treated to modern accompaniment in broken chords, in the key of A♭, finishing, after some harmonic and sequential development, with a few arpeggios.

Fantasia

Like the preceding, the fantasia has no settled form. Indeed, what was said about the capriccio might equally apply in the present case, with this exception, that the fantasia is not always of the same light and playful nature as the capriccio. The following initial phrase from a fantasia by Mozart will verify this (Ex. XXXIII):

Ex. XXXIII



Of the first fifteen measures of this fantasia, thirteen are taken up with modified imitations of the above phrase, two of which are inverted, in various keys, as follows:

1st time, as above, in the key of C minor, beginning on the tonic.

2d time, in the key of F, beginning on the subdominant.

3d time, in the key of D♭, beginning on the dominant.

4th time, in the key of D♭, beginning on the leading-note.

5th time, in the key of D♭, beginning on the tonic.

6th time (inverted), in the key of B♭ minor, beginning on the supertonic.

7th time (inverted), in the key of E♭ minor, beginning on the dominant.

8th time, in the key of B, beginning on the tonic.

9th time, in the key of B, beginning on the leading-note.

10th time, in the key of D, beginning on the dominant.

11th time, in the key of F minor, beginning on the mediant.

12th time, in the key of C, beginning on the dominant.

13th time, in the key of E♭ minor, beginning on the mediant.

Except the opening phrase there is not a single progression in the key of C minor from the beginning to the end of the movement. This is all fantastic enough, but the music is lovely.

Extravaganza

The object of the extravaganza is to treat the subject in a somewhat comical fashion, or to burlesque well-known themes. It is entirely without order or design

of any kind. Of course extravaganzas may be and have been written with something like regularity and order in their construction; on the other hand, the phrases and sections of this style of composition may often be found devoid of all balance, the keys not too well considered in respect of their relationship, and the effects produced and the means taken to produce them not always quite legitimate.

Potpourri

The potpourri is an instrumental medley of popular airs strung together in a somewhat haphazard kind of way. When performed by a military band to an open-air audience it generally proves attractive.

Scherzo

The scherzo is perhaps the lightest and most playful of instrumental pieces. It is used as one of the movements of a sonata or a symphony. The form of the scherzo is of two kinds—it either resembles the minuet or the rondo. In the former case it is divided into two distinct parts. In the first part we have the principal theme given out and elaborated. In the second part, which is called the trio, a new theme appears in a related key: the theme of the trio is usually of a less whimsical nature than the principal theme. After the trio the first part is repeated. When the rondo form is adopted the scherzo is generally very much longer, and the principal subject is more freely and more humorously treated than in the rondo proper.

In Beethoven's sonata Op. 31, No. 3, we have a good specimen of a scherzo in the rondo style. This

is the only scherzo which Beethoven wrote in two-four time. It contains one hundred and seventy-three measures, and the principal theme appears six times in various keys and with modified figures.

Rondo

A rondo may consist of any number of subjects. These subjects may be repeated in any order and any number of times, provided the principal subject is made to close as well as to open the movement. As the subjects appear in succession, they may all change their keys except the principal, which generally keeps to the original key, no matter how often it may appear. It is this recurrence, or coming round again of theme and key, that gives the name of rondo to this form of composition.

The idea of the rondo, while it may be expressed with no small amount of complicated detail, is of the very simplest description. It is to present to the ear, and to the mind, something that has been heard before, something that may be easily recognized, and which, by reason of the recognition, will afford satisfaction and pleasure. This is why the principal theme of the rondo is so frequently brought round again, and always in its original form and complexion. The simplest (first) rondo consists of a subject, or section, a second section, and a return of the first section. The second section may then be repeated, followed by another repeat of the first section; in which case the form is called first rondo extended. Most usual, especially in the later movements of the symphony, is the so-called second rondo. This consists of first, sec-

ond, first, third, and first sections, occurring in the order named. At the end of the rondo, as after any piece, a coda may be added if desired, to form a suitable close. There are other varieties of this form, besides the sonata rondo and sonatina rondo. The student must learn to distinguish between the rondo and the so-called song-forms, the latter being more clean-cut but less plastic in style. For a fuller description, see the article on "Drawing-room Music and its Forms," by Louis C. Elson, in this series.

Song Forms

The song forms (vocal or instrumental) are built up of so-called periods, consisting of two phrases, antecedent and consequent. The form is rarely limited to a single period. It may be bipartite, with two wholly or partly independent periods; or tripartite, consisting of a period, a second period or free episode, and a return (wholly or in part) of the first period. See the article on "Drawing-room Music and its Forms," referred to in the paragraph above.

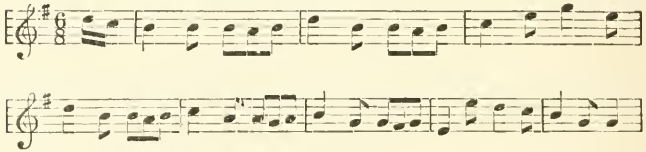
March

The march is perhaps most closely associated with military movements; but it frequently finds a place in the concert-room, on the stage, and in the church. The military march is always of an inspiring nature, and consists largely of stirring melody and strongly marked and simple rhythm. Used for other than military purposes, the character of the march is varied —its constitution becomes more or less polyphonic. This we find to be the case in orchestral marches, wed-

ding marches, processional marches, funeral marches, and others. The march, especially the military, often begins with the last beat of the measure. The starting-note prepares the mind for the step-off, which takes place on the following strong accent, insuring precision and uniformity of movement. In other than military marches this preparatory note is dispensed with. Sometimes also we find several preparation-notes employed—the dominant repeated a number of times being a favorite device. Even an introduction of several measures before the subject of the march begins is not uncommon. The march is usually written in four-four time. Some examples of two-four are to be found, but triple time would be unsuitable, and would throw the strong accent alternately on the left and right foot. In quick marches, where the step is required to be quicker and the whole action more nimble, such as in a "March Past," sometimes a six-eight rhythm is adopted. The following is a well-known example (Ex. XXXV):

Ex. XXXV

First Period of "March Past."

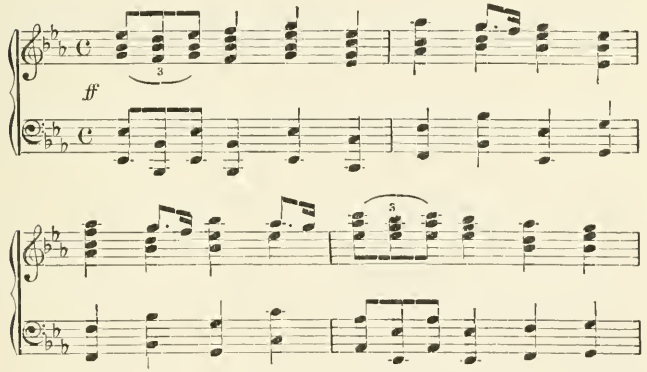


Simple march forms have only one part, containing two distinct subjects. The two subjects represent exactly two equal halves of the movement. The sections are invariably of a uniform length, and the phrases are evenly balanced. (See Handel's "Dead March" in

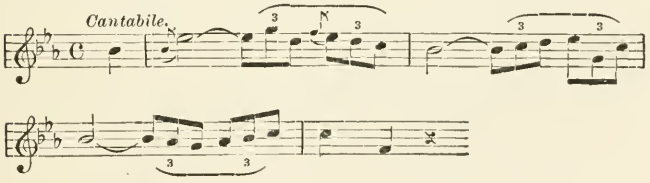
"Saul.") Sometimes the march finishes with the second subject as in the example just named, and sometimes the first subject is repeated after the second. This, of course, is the song form. More extended march forms have two or three parts, the second of which is sometimes called the trio. Each part may contain two or more subjects.

Sometimes solo movements are introduced into the march. A very effective illustration of this is to be found in Meyerbeer's "Coronation March." This march opens full, thus (Ex. XXXVI):

Ex. XXXVI



At the eighteenth measure the solo movement, of sixteen measures in the original key, begins thus:



After which the opening subject occurs in the relative minor key leading back to the major. Then follows the solo movement again, this time in the subdominant key with a repetition in the original key. The march is then brought to a close by a full finale movement of twenty-three measures in which occur snatches of the opening subject, mixed with some new material.

The scope of the march is greatly extended. Indeed, it may be said to range from the sublime to the ridiculous. As an exemplification of this we have only to compare the solemn grandeur of Beethoven's "Funeral March" with the grotesque comicality of Gounod's "Funeral March of a Marionette."

Taking the march form, however, in its ordinary comprehension, we can only say that its chief features are predominant melody, evenly balanced measure, simple and strongly marked rhythm, squarely cut phrases, and uniform sections. Marches are written for the pianoforte, the organ, for brass and military bands, and for orchestra.

CHAPTER IX

COMPOUND FORMS

Suite—Sonata: Elaborate Analysis of This Form—Overture —Concerto—Symphony.

COMPOUND forms contain several different movements—we might almost say separable movements —such, for instance, as the employment in succession of two or more of the simple forms already described, so as to form one composition having a distinctive and comprehensive title.

Suite

The suite was the earliest of compound forms. It consisted of a series of old dance tunes. It usually began with a prelude or introduction, as modern waltzes frequently do, and sometimes finished with an air with variations. This latter movement consists of a melody being given out first in its simplest and plainest possible fashion, and then repeated several times, each repetition introducing some variation of rhythm or melodic configuration. The air known as "The Harmonious Blacksmith" finishes one of Handel's suites. Suites were written for the harpsichord, for violins, and for the organ.

Sonata

The sonata is the most important and the most law-abiding, so to speak, of all compound forms. In earlier times it was a much different thing from what it is

at the present day; yet the sonata of the seventeenth century might be considered as a faint prototype of the modern and highly developed compositions of Haydn, Mozart, and Beethoven, which bear the same name. The old sonata was little more than a suite, and as such it contained at least one of the prominent features of the modern sonata—a succession of varied and independent movements.

The modern sonata contains three or four distinct movements, but here its resemblance to the older form might be said almost, if not entirely, to cease. Not only are the themes of the different movements in the modern sonata more extended, elaborated, and developed than in its predecessor, but the first movement is held subject to a certain order of treatment which is in itself sufficient to distinguish the modern sonata from other musical forms. It was Haydn who fixed the form of the first movement, and all succeeding composers have followed, more or less strictly, on the lines adopted by him. This first movement is called the binary form, because it contains two subjects or themes; the opening theme being in the key of the tonic, and the following or secondary theme being in the key of the dominant, when the key is major; when the key is minor the second subject is most usually in the relative major, and rarely in the dominant key.

The first movement consists of three parts, and may be explained thus:

The first part is called the exposition or the announcement. Here the two themes are given out in respective order. Generally a concise closing theme follows, usually in key of the second theme. In legal

terms this might be considered as the statement of the case. This part, which finishes in the key of the second subject, ends with a double bar, and is always repeated.

The second part is called the working-out, or the development. Here the two themes, unconfined to any particular keys, are extended, embellished, and contrasted by means of modulation, inversion, imitation, and harmonic and rhythmic devices. This part bears a direct analogy to the enlargement, argument, or discussion of a pulpit or platform discourse; or to the examination, overhauling, and explanation of the circumstances connected with a case at law. The second part is not repeated, and consequently is not marked off by a double bar, but leads directly into the third part.

The third part is called the repetition or the recapitulation. Here the key of the tonic predominates, and these subjects are again presented to us in a prominent fashion, in less rigid succession, perhaps, than in the first part, but this time all in the tonic key. This third part is exactly similar to the peroration of a discourse, or to the summing up of the evidence in a legal court.

Now let us examine briefly a few of the objects sought to be attained by the formal arrangement of the first movement. In the opening portion the two themes are given out in different keys to insure some variety; but the keys are always those most familiar to us, in point of relation, so that we may not be distracted from grasping the subjects clearly and with the least possible effort. This part is repeated, so that the principal matter of the composition may be the more deeply impressed upon the mind. The first part

is the only part that is repeated. The subjects being fresh, the ear gratefully accepts their repetition; but in a later part, after the frequent recurrence of the themes, repetition might become wearisome. The first part ends in the dominant, or some related key, so as to lead the ear to expect something to follow.

In the second or middle part the composer has freer scope for his fancy. Here we are led, if we may be allowed the simile, away from the common highway, by a side-path, into the intricacies of rich and variegated scenery. The individual objects around us are not altogether unfamiliar. We have seen them before under somewhat different aspects; but here their artistic arrangement and wonderful combinations open up a new and wide field of delight. Here, while still retaining a vague sense of our locality, we may revel in new beauties, and lose ourselves in admiration and amazement, until we are guided back again to the road from which we first started, and where we easily recognize the broad landmarks that first attracted our attention, thus reaching the third part.

In the third part our feelings are soothed, our excitement is calmed—we are once more at home, so to speak. The principal key prevails, and the two familiar subjects are presented to us in their most recognizable garb—the key of the tonic, so that the conclusion of the movement is rendered easy of apprehension and thoroughly satisfactory both to the ear and the mind.

We have tried to show that the material employed in the first movement of a sonata occurs in a strictly psychological sequence. It interests and engages the mental faculties in a purely rational manner, and calls

forth a succession of ideas in the same order that would naturally result from the consideration of almost every subject. The general features of form which we have detailed will be found to predominate, more or less, in the first movement of all sonatas built on orthodox lines. Of course, were we to deal with minute details we should find those features represented in numberless modifications, and surrounded by qualifying matter too varied to particularize. Nevertheless, a persevering analysis will always disclose the distinguishing essentials of the modern sonata wherever they are present. This last sentence would seem to imply that the distinguishing features of the modern sonata are not always present. Such, indeed, is the case. Examples of sonatas are not wanting in which the necessary features are either but partially adopted or are not employed at all. The student must learn to discriminate as to the classification of such cases according to his own judgment. We have specified accurately the form of the sonata. first movement; and where this form is not found to exist, the composition, although thereby perhaps not a whit the worse as a composition, must be held to be somewhat irregular.

In examining the above, the student will notice that there are other passages employed besides those of the two principal subjects. These passages are employed simply to give variety; to relieve the music, so to speak; to keep the composition from becoming too stiff and formal; to afford an unfettered opportunity to the composer to exercise his fancy. The passages referred to have a good deal of license allowed them. An episode is a passage of some little impor-

tance, but which ostensibly belongs to neither of the two principal subjects. A run is a progression of single notes without any decided melodic form. A transition is a short passage filling up the gap between the end of one theme and the beginning of another. Modulating passages explain themselves.

To distinguish the principal subjects from what we might call the auxiliary matter—that is to say, the episodes, codettas, modulating and other passages—is frequently somewhat difficult, owing, as often happens, to the excess of the auxiliary over the principal matter. This, however, must be satisfactorily accomplished in every case before we can say definitely whether or not the first movement is built upon strict principles. The following is a plan of the first movement of Beethoven's sonata Op. 2, No. 1:

1. Chief theme, F minor, measures 1–8; tributary passage, modulatory, measures 8–20.
2. Second theme, A flat major, measures 20–41.
3. Closing theme, A flat major, measures 41–48. Repeat of divisions 1, 2, and 3.
4. Development, founded on parts of the first and second themes, measures 49–93. Returning passage, measures 93–100.
5. Return of chief theme, F minor, measures 101–108; tributary passage, with modulation altered, measures 108–119.
6. Second theme, F minor, measures 119–140.
7. Closing theme, extended, F minor, measures 140–152.

There is no coda. The repeat of the development and recapitulation is not necessary now, though usually called for in Haydn's time. The exposition, however, must always be repeated.

For a good example of the sonata form with the exposition in the tonic and dominant minor, the student may look at the finale of this same work. In place of the development in that movement is a section of new material, called the middle part. Its major mode forms an excellent contrast to the constant minor of the themes.

A form closely resembling the sonata is the so-called sonata rondo, with divisions as follows:

1. Chief theme, as in sonata.
2. Second theme, as in sonata.
3. Closing theme, as in sonata.
4. Chief theme in tonic. (No repeat of divisions 1, 2, and 3 is made.)
5. Middle part, or development; if the latter, it is not as extended as in the sonata form.
6. Return of chief theme, as in sonata.
7. Return of second theme, as in sonata.
8. Return of closing theme, as in sonata.
9. Chief theme, or part of it, in the tonic.

A coda may be added if desired. A good illustration of this form may be found in the final movement of Beethoven's "Sonata Pathétique." It will be noticed that the succession of keys is the same as in the sonata movement, and that the two forms are much alike. The sonata rondo, however, has no repeat of themes before the exposition, but gives instead an extra return of the chief theme, both after the exposition and at the close of the movement. The chief theme in this form thus has more prominence than in the sonata form. Being given more often than the other themes, like the first section of a rondo, it should consist of interesting material, and be made noticeable enough to insure proper balance.

The sonatina, which has been used by many classical writers, is a form resembling a small sonata without closing theme or development. It consists, therefore, of the following divisions:

1. Chief theme, major or minor.
2. Second theme; if the first is major, the second is in the key of the dominant; if the first is minor, the second is in the relative major. These two themes may be repeated.
3. Chief theme, in original key.
4. Second theme, in key of chief theme.

The sonatina has two or three short movements, the second often being a simple song form and the third variable. The works of Clementi or Kuhlau afford good examples for the student.

Sometimes, after the fourth division of a sonatina movement, the chief theme returns at the end. The best modern theorists call this a sonatina rondo, as the key scheme distinguishes it from the first rondo extended.

So far we have only described the first movement of the sonata; the succeeding movements require but a few words. The composer is perfectly free to arrange the order and succession of those secondary movements according to his own ideas. After the first movement, which is very frequently an allegro, we often find an adagio, a largo, or andante for the second movement. In this case the music invariably partakes of a song-like character. It is often a song form, or a short rondo. The third movement, in the full four-movement form, is either a minuet or scherzo. Sometimes this may come second and the slow movement third. The finale is either in the form of the first movement (sonata-allegro), or a rondo, or a theme and varia-

tions. In the three-movement form the minuet or scherzo is usually omitted.

In concluding this notice of the sonata form, we must warn the student not to expect our description to tally with every sonata. As we have already said, the rules regarding the first movement according to Haydn are generally accepted as orthodox; but there are innumerable sonatas to be found to which the Haydn principles do not apply. For instance, the first movement of Beethoven's sonata Op. 49, No. 2, has really no middle part. His Op. 29, No. 2, known as the "Moonlight" sonata, has a first movement peculiar to itself. His Op. 26 is not a sonata at all, but simply an air with variations—unless we consider it to be built upon the lines of the old suite.

The sonata is most usually written for the pianoforte; but the form is not unusual for string combinations. Organ sonatas also are to be found; but these have little in common with the form described above, being more massive in their build, and of a contrapuntal and fugal nature.

Overture

The overture is the opening number of a vocal work, such as an opera or an oratorio. The real purpose of the overture should be to prepare the minds of the hearers for what is to follow. The overture is not an integral part of the work, but it should exhibit some of its characteristics, or at least have some intelligible relation to it. All overtures do not do this. In Handel's time the overture had no connection with the body of the work whatever. At that period it was of a more fixed form than at the present day. The

old Handelian overture was invented by the French composer Lulli (1633-87), and consisted of a slow harmonic movement followed by a quicker movement in the fugal style. The second movement was somewhat longer than the first. Compare the overture to "The Messiah" (Handel). Sometimes a dance tune was introduced. Compare the overture to "Samson" (Handel). This form was adopted both for oratorio and opera.

After Handel's time the old French overture, as it was called, was largely discarded, and a new style began to be developed, which, in opera at all events, sought to foreshadow the scenes or circumstances depicted in the work itself. The form adopted, however, was of no particular order. Sometimes the principal musical themes in the opera were employed in the overture with introductory and connecting passages of various designs; sometimes the themes were artistically blended, contrasted, and supplemented by striking orchestral surroundings, and occasionally a free fugal treatment was adopted.

The oratorio overture of the present day and of recent years has also undergone a change somewhat similar to that of the operatic overture. Perhaps the latest oratorio overture of any importance written on the lines of the old French overture is that to Mendelssohn's "St. Paul." In his following work, "Elijah," Mendelssohn chose a more modern form of overture—one movement in free fugal style. Other less important oratorio overtures borrow themes from the body of the work; but it is difficult, if not altogether impossible, to trace any feature by which the overture may be peculiarly distinguished, beyond the fact

of its being the introductory number of the particular work to which it belongs.

There is, however, another class of overture called the concert overture. This is quite an independent composition. It is not used as an introduction to something following. The concert overture has generally some title attached to it, which may be supposed to indicate the nature or the purpose of the composition, as in Mendelssohn's "Hebrides," Schumann's "Julius Cæsar," Sullivan's "In Memoriam," and so on. Very often we find the concert overture bearing strong resemblance to the first movement of a sonata; at other times the rondo character is prominent. Mendelssohn's overtures sometimes exhibit a rondo-like character; but, unlike the rondo proper, the principal subject, as it recurs, appears in several different keys.

It will be seen, then, that if we omit the French overture of Lulli, it cannot be said that the subject of our present notice has any distinct form. It is quite proper, whatever its form may be, that it should be called an overture when it is the opening number of a work, but as an independent concert-piece it might just as well be called by any other name.

Concerto

A concerto is a composition written for a solo instrument and orchestra. The violin and the pianoforte are the two instruments most commonly employed for the solo work, but concertos have been written in which the organ, the flute, and the clarinet have had respectively the solo work assigned to them. In a concerto the solo part is designed to display the skill of the soloist. Notwithstanding this, however, the or-

chestra must not be considered as a mere accompaniment. This would be making the work a homophonic composition; while, as a matter of fact, it is essentially polyphonic, the work of the orchestra being quite as important as that of the solo instrument. The two—the orchestra and the solo instrument—perform mutually together; they play to and for and with each other; they work in concert, so to speak; hence the term concerto.

The concerto consists of three movements, very much resembling those of the sonata. The first movement differs slightly from the sonata first movement in this respect: the laws regarding the giving out and key-relationship of the subjects are not so rigid. The second subject in the concerto frequently finishes in the key of the tonic. There is also frequently a third subject introduced, and the episodes throughout the movement are more important than in the sonata. In the first movement of the concerto the subjects are first given out by the orchestra, and then repeated in a modified or elaborated form by the soloist. Sometimes the phrases of the themes are divided between orchestra and soloist, in a kind of antiphonal fashion, and extended and developed in various ways.

The succeeding movements are similarly dealt with according to their form, but on a less comprehensive scale.

Symphony

The symphony is purely an orchestral composition. (Beethoven, it is true, in his Choral symphony has employed voices along with the orchestra; but this is an exceptional case.) For its form the symphony is in-

debted, like all other instrumental compound forms, largely to the sonata. Like the sonata, it consists of several distinct movements; but in the delivery of its principal themes it is, like the overture and the concerto, less exacting than the sonata. In the symphony all the resources of the orchestra are fully employed; it is therefore more colossal in its proportions, more varied in the details of its development, and more comprehensive in its themes and episodes than any other instrumental form. It is the noblest and grandest of its kind.

The composition of a symphony requires the very highest musical experience, skill, and feeling. All the devices of musical art are brought into operation in the symphony. A knowledge of orchestral effects, the power to devise melodic themes of striking and appropriate character, a keen appreciation of harmonic coloring, a fertile conception of rhythmic figures, the faculty to arrange large groups of phrases in symmetrical order—these are some of the qualifications which the mere formal construction of the symphony requires, to say nothing of the genius and the inspiration which that stupendous work in its ideal character demands.

Conclusion

We have endeavored to give a plain and simple explanation of the most important and best known musical forms. Those which we have not described are, in the majority of cases, of an obscure or unimportant kind, and will be found to be sufficiently explained in any ordinary dictionary of musical terms.

CHAPTER X

HARMONY

Definition—Difference between Harmony and Counterpoint—Complex Counterpoint and Simple Harmony—Of Italian Origin—Emancipation of Harmony—Chopin's Harmony—Grieg—Wagner—Monotony and Restlessness—Theories of Harmony—Necessity for Rules.

THE simplest definition of harmony that can be given is that it is the sounding together of two or more different musical tones. The most elaborate treatise, however, could not exhaust the resources of the possible harmonic combinations and sequences. Whenever a new genius arises he finds a way of expressing himself in harmonies that do not sound like those of his predecessors. Bach's "Saraband" of 24 bars in the G minor "English Suite" contains about as many harmonic changes as Grieg's song "Du bist der junge Lenz," of 28 bars. Yet these two pieces differ as widely as do the two hundred years that separate the dates of their composition. This difference of manner is to be found between contemporary composers as well as between old and modern masters. No one who knows anything of musical style could confound the harmonies of Bach and Handel. How utterly unlike that of Bach is the 24-bar "Saraband" in Handel's G minor suite, No. 16. Mendelssohn and Schumann, Brahms and Wagner, Chopin and Liszt,

THE LUTE-PLAYER

From the Painting by A. Seifert

Strauss and Elgar, Weber and Schubert, Berlioz and Meyerbeer all worked during the same periods of musical development; yet their harmonies are not alike. Sullivan and Grieg were fellow-students in Leipzig. The violent contrast between their styles only emphasizes the extraordinary resources of harmony, which up to the present have proved inexhaustible.

During the great contrapuntal epoch little attention was paid to harmony; that is to say, the composer did not choose his harmony and then make his counterpoint fit his harmonic scheme. It was the counterpoint which received the lion's share of care and attention, while the harmony was as ignominiously treated as the poor sheep in the fable.

It is of course impossible to make a contrapuntal combination that does not produce some kind of harmony. It is possible, however, to have a very great contrapuntal complexity with the most meager harmony; as, for instance, in Tallis's motet "Spem in alium non habui," where we frequently find a forty-part counterpoint with no change of harmony for several bars. Such a Barmecide feast of visionary and unreal fare cannot satisfy the cravings of the heart for genuine musical substance; for the deepest note of musical emotion can be sounded by harmony only. Harmony is the color, the warmth, the passion of music.

Palestrina, though he lived in the contrapuntal day before the discovery of the tempered scale, was an inspired composer. His music, because of the varied chords which his ingenious counterpoint often makes, delights us to-day. He was fettered to the Church, unfortunately, and all his greatest works are yoked to the turgid Latin text. The painters of his day wrought

altar-pieces, crucifixions, and Madonnas till all the walls in Italy were draped in penitential canvas. But the blue and gold and purple haze of the sunny Italian landscapes, which have been the inspiration of so many glorious pictures from Titian to Turner, were also beginning to make their genial warmth felt within the shady aisles of the cathedrals. On the shores of the Mediterranean or the Adriatic, whose azure waves still sparkle in the verse of Vergil, Tibullus, Catullus, the sense of harmony first found its voice. It is not improbable, as some authors affirm, that St. Mark's in Venice was the cradle of harmony. Certain it is that in the compositions of the masters of music who directed the musical services of this gorgeous Romanesque-Byzantine church, during the first half of the seventeenth century, we find a relaxing of the rigid rules of counterpoint, and the introduction of the sensuous element of beautiful chord changes, undoubtedly an expression of that harmonic instinct which is such an integral part of the modern composer's nature. The old masters of counterpoint could hardly have imagined that in admitting a few harmonic effects into their compositions they were introducing an element that was destined to assume so much importance and drive counterpoint from the field altogether.

The difference between harmony and counterpoint has been aptly set forth by Ouseley, who says that the harmonist looks at the chords perpendicularly, while the contrapuntist considers the importance of each separate melody; that is to say, looks at the composition horizontally. From the viewpoint of the harmonist it is of little importance what manner of melody

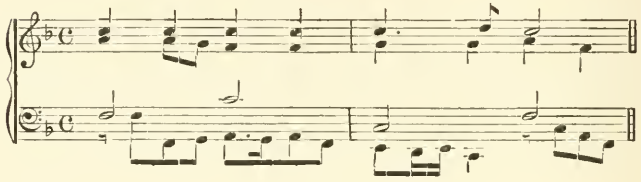
the separate voices make if each voice is played alone. He considers the effect of each complete chord and its progression to the next complete chord. But the contrapuntist aims at having each voice a melody in itself. Harmony sacrifices a great deal of detail of fine part-writing for the sake of the general effect of the whole. Counterpoint, in the strictly classical sense of the definition, has a powerfully restraining influence on the harmonic freedom of the composer. Paradoxical as it may sound, it is nevertheless true that the student of practical composition finds the difficulties of counterpoint to lie in the harmonic progressions, and the obstacles in harmony to be the part-writing—that is to say, the counterpoint.

In the first example (*a*) given below are combined three well-known tunes and a florid counterpoint bass in the manner of the eighteenth-century masters. The soprano melody is Sullivan's "Onward, Christian soldiers"; the alto is from J. J. Rousseau's "Le devin du village"; the tenor is the theme of the variations in the finale of Beethoven's "Eroica" symphony; and the bass is our own. This, of course, has no musical value, but it will serve to illustrate the manner of elaborating themes in vogue before the days of harmony. There are only two chords, F and C, in the example, and the themes stand out clearly one from the other by reason of the contrasted lengths of the notes of which they are constructed.

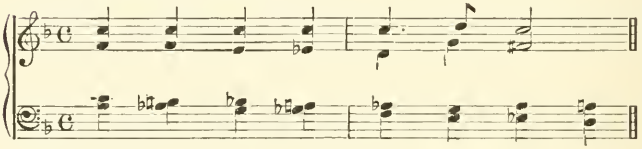
In the second example (*b*) the melodic material is reduced to the one Sullivan tune, here harmonized in a modern manner, more or less like Grieg's "Ballade" for piano solo. It will be seen that the interest consists in the progression of one complete chord after

another complete chord, and not in the variety of rhythms of a number of tunes which are apparently independent of each other. The first example has four themes and two harmonic changes; the second has one theme and eight different chords:

(*a*) Diatonic counterpoint.



(*b*) Chromatic harmony.



Berlioz, great musical colorist and impressionist as he was, detested the old contrapuntal style. "Why," he exclaims, "should the vanquishing of the difficulties of counterpoint be supposed to add to the religious sentiment of a work?" He even questions Palestrina's right to be called a composer. He avers that most of the old Italian's work consists of four-part perfect chords with a few suspensions, without melody and without rhythm, and that there is only evidence of a patient science in overcoming certain artificial contrapuntal problems.

With Bach's fugues Berlioz was continually at enmity. The brilliant French composer's contempt for

the fugal style is to be seen in his superb "Damnation of Faust." In the tavern scene the drunken revelers sing a short and weakly constructed fugue, concerning which Mephisto remarks, "Here we find bestiality in all its frankness." As an antithesis to this, we have the criticism of the great contrapuntist and epic composer Handel, who said of the greatest dramatic composer of the day, "Gluck has no more counterpoint than my cook." There is room in the world, and welcome too, for the profundity of Bach, the grandeur of Handel, the noble tragedy of Gluck, and the fiery passion of Berlioz. It is puerile for a modern composer, who has inherited all the rich legacies slowly accumulated by his predecessors, to laugh at the productions of the simple toilers whose patient plodding made his riches possible.

The complete emancipation of harmony was the natural result of the establishment of the tempered scale. And the instrument which has contributed most to the discovery of new harmonic progressions is the piano. A good piano, well tuned on the principles of the tempered scale, offers an easy and delightful means of testing every conceivable chord. Théodore Dubois, late director of the Conservatoire Nationale de Musique of Paris, said that in his long experience as a teacher of harmony and musical composition he had found that those of his pupils who had learned the piano became masters of harmony more readily and thoroughly than those who learned the violin.

The most lovely human voice and the exquisite violins of Stradivarius and Guarnerius are impotent in harmony. They have contributed, and will continue to contribute, to the development of melody. The violin

and the piano—one the most perfect in compass and modification of tone-color for the expression of melody, the other unlimited in its harmonic resources—mutually act on each other for the general good of music. The composer who writes for the orchestra carries about with him the harmonic instinct which the piano has fostered; and though his score is full of the richest and most elaborate harmony, the melodic nature of the stringed instruments curbs his exuberance of chord changes and prevents him from making his composition a restless and vague conglomeration of modulations, like a picture without a theme, a chaos of color.

The composer who best understood the nature of the piano, and who wrote for it in a manner most in accordance with its nature, was Chopin. In the works of this inspired Pole the student will find some of the most beautiful harmonies and melodies ever devised by the mind of man. These works, therefore, are excellent models for the student of harmony to analyze. And Edvard Grieg was one of the boldest harmonic innovators of recent times.

As in the past, so in the future will every composer of importance find in the limitless combinations of harmony a means of expressing his own personality. The best masters will never do entirely without counterpoint; nor did the best masters of the past ignore the musical beauty of harmony in their contrapuntal works. The counterpoint we employ to-day is not the colorless diatonic chant of the old Church modes. Its white light has been shattered into iris-hues by the prism of modern harmony. It is chromatic—that is to say, "colored"—so called because when its foreign

sounds began to be heard in music, and the old notation had no signs to represent them, the notes to be raised or depressed a half tone were printed in red instead of the customary black.

Bach has not yet had a superior as a musical contrapuntist, and it will probably be a very long time before Wagner's amazing fertility in harmony is surpassed. The prelude to "Tristan und Isolde" alone contains more harmonies than can be found in two hundred years of Italian opera down to the death of Rossini. Can the grandeur and beauty of the harmonies of "Götterdämmerung" ever be excelled? But because Bach in counterpoint and Wagner in harmony seem to say "Thus far shalt thou go and no farther!" it by no means follows that the possibilities of music are exhausted. Tchaikovsky's "Pathetic" and Dvořák's "From the New World" symphonies are sufficient refutations in themselves of this charge.

Beethoven's treatment of a number of Scotch tunes is very unsatisfactory; yet Beethoven well knew the surprising and beautiful effect of harmonic changes, as many a page of his sonatas and symphonies will testify. Though composers of modern times are not limited to the few chords of the old contrapuntists, they frequently make use of a harmony as simple as that of their antecedents. In the beginning of "Das Rheingold" Wagner employs the chord of E flat for 136 bars without a break. This monotony, which is of course intentional, is quite different from the harmonic sameness that in the older works of any dimensions causes our interest to flag, and vitiates the masterly counterpoint.

The art of composing beautiful and striking har-

mony cannot be taught. It is the birthright of talent and genius, as is the gift of melody. The student with a natural aptitude for music, however, can best develop his harmonic instinct by repeatedly hearing the works of the great composers. The one remarkable genius on whom Nature lavished abilities approaching the combined powers of his predecessors was Richard Wagner. "Die Meistersinger" and "Der Ring des Nibelungen" are the epitome of the profundity, the grandeur, the noble tragedy, and the fiery passion of the best of Wagner's predecessors.

Along with the hearing of good music must go the careful study of it in detail, and a long practice of harmony exercises with a text-book and under the direction of a competent master. And the student must continue his studies notwithstanding the fact that he finds all the rules of his theory-book broken repeatedly by the great masters. Theory must forever lag behind the practice of the composers. The theorist can only classify and explain what the composer has done. He is not a creator, an inventor. The difficulties of producing a perfect theory of harmony are so great, unfortunately, that most theorists fill their pages with the rules of older theorists. Hence it is that the student of to-day has frequently to subject his practice to the rules established by the composers who wrote before the advent of the tempered scale.

The cry of "Rule-breaker!" "Outlaw!" has been hurled at Bach, Haydn, Beethoven, Wagner, Richard Strauss; and probably it will be heard as long as composers produce and theorists deduce. But the discipline of established rules has a very important bearing on the character of the future composer, when he

is at liberty to roam at large in the free world of harmony. These rules will prove to be the rudder to his ship. His genius only sends the breeze that fills the sails. Without these rules he will be uncertain in his choice of harmonies. Without these rules he will be unable to defend himself or explain himself, when his procedure is called in question.

CHAPTER XI

THOROUGH-BASS

A Species of Musical Shorthand—Simple Method by which the Student may Either Read or Write Figured Bass—The Use of Lines in Organ-point—Knowledge Essential for Playing Handel and Bach.

THOROUGH-BASS is an instrumental bass part, continued, without interruption, throughout an entire piece of music, and accompanied by figures, indicating the general harmony.

In Italy, the figured bass has always been known as the basso continuo, of which term thorough-bass is properly regarded as a sufficiently correct translation. But in English usage the meaning of the term has been perverted, almost to the exclusion of its original intention. Because the figures placed under a thorough-bass could only be understood by a performer well acquainted with the rules of harmony, those rules were vulgarly described as the rules of thorough-bass; and now that the real thorough-bass is no longer in ordinary use the word survives as a synonym for harmony—and a very incorrect one.

The invention of this form of accompaniment was long ascribed to Lodovico Viadana (1566-1645), on the authority of Michael Prætorius, Johann Cruger, Walther, and other German historians of almost equal celebrity, fortified by some directions as to the manner

of its performance, appended to Viadana's "Concerti ecclesiastici." But it is certain that the custom of indicating the intervals of a chord by means of figures placed above or below the bass note was introduced long before the publication of Viadana's directions, which first appeared in a reprint of the "Concerti" issued in 1612, and are not to be found in any earlier edition; while a true thorough-bass is given in Peri's "Euridice," performed and printed in 1600; an equally complete one in Cavalieri's "Rappresentazione di anima e di corpo," published in the same year; and another, in Caccini's "Nuove Musiche" (Venice, 1602). There is, indeed, every reason to believe that the invention of the continuo was synchronous with that of the monodic style, of which it was a necessary contingent; and that, like dramatic recitative, it owed its origin to the united efforts of the enthusiastic reformers who met, during the closing years of the sixteenth century, at Giovanni Bardi's house in Florence.

After the general establishment of the monodic school the thorough-bass became a necessary element in every composition written either for instruments alone or for voices with instrumental accompaniment. In the music of the eighteenth century it was scarcely ever wanting. In the operas of Handel, Bononcini, Hasse, and their contemporaries it played a most important part. No less prominent was its position in Handel's oratorios; and even in the minuets and gavottes played at Ranelagh it was equally indispensable. The "Vauxhall Songs" of Shield, Hook, and Dibdin were printed on two staves, on one of which was written the voice part, with the melody of the ritornelli inserted in single notes between the verses, while the

other was reserved for the thorough-bass. In the comparatively complicated cathedral music of Croft, Greene, and Boyce the organ part was represented by a simple thorough-bass printed on a single stave beneath the vocal score. Not a chord was ever printed in full either for the organ or the harpsichord; for the most ordinary musician was expected to play at sight from the figured bass, just as the most ordinary singer in the days of Palestrina was expected to introduce the necessary accidental sharps and flats in accordance with the laws of cantus fictus.

The art of playing from a thorough-bass still survives, and even flourishes, among the best cathedral organists. James Turle and Sir John Goss played with infinitely greater effect from the old copies belonging to their cathedral libraries than from modern "arrangements" which left no room for the exercise of their skill. Of course, such copies can be used only by those who are intimately acquainted with all the laws of harmony; but the application of those laws to the figured bass is exceedingly simple, as we shall proceed to show.

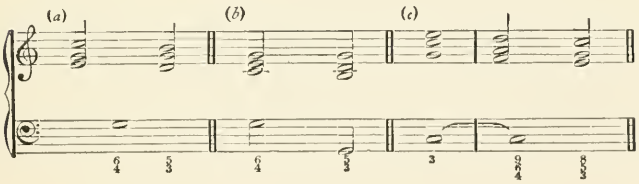
1. A wholesome rule forbids the insertion of any figure not absolutely necessary for the expression of the composer's intention.

2. Another enacts that in the absence of any special reason to the contrary the figures shall be written in their numerical order, the highest occupying the highest place. Thus, the full figuring of the chord of the seventh is, in all ordinary cases, $\frac{7}{5}_{3}$, the performer being left at liberty to play the chord in any position he may find most convenient. Should the composer write $\frac{3}{5}_{7}$, it will be understood that he has some particular reason for wishing the third to be placed at the top of the

chord, the fifth below it, and the seventh next above the bass; and the performer must be careful to observe the directions implied in this departure from the general custom.

3. In conformity with Rule 1, it is understood that all bass notes unaccompanied by a figure are intended to bear common chords. It is only necessary to figure the common chord when it follows some other harmony on the same bass note. Thus, at (*a*), in Example I, unless the common chord were figured, the $\frac{6}{4}$ would be continued throughout the bar, and in this case two figures are necessary for the common chord, because the sixth descends to a fifth and the fourth to a third. At (*b*) two figures are equally necessary, otherwise the performer would be perfectly justified in accompanying the lower G with the same chord as the upper one. Instances may even occur in which three figures are needed, as at (*c*), where it is necessary to show that the ninth, in the second chord, descends to an eighth, in the third. But in most ordinary cases, a 3, a 5, or an 8 will be quite sufficient to indicate the composer's intention.

Ex. I

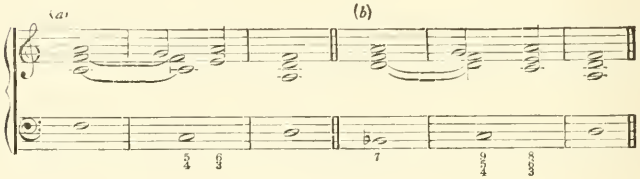


The first inversion of the triad is almost always sufficiently indicated by the figure 6, the addition of the third being taken as a matter of course, though cases

will sometimes occur in which a fuller formula is necessary, as at (*a*), in Example II, where the 3 is needed to show the resolution of the fourth in the preceding harmony, and at (*b*), where the 8 indicates the resolution of the ninth and the 3 that of the fourth.

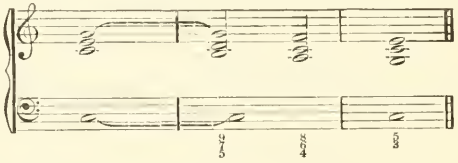
Figure 6 indicates, in all cases, the first inversion of the triad, and nothing else; and, were any such change now introduced, we should need one code of laws for the interpretation of old thorough-basses and another for those of later date.

Ex. II



The second inversion of the triad cannot be indicated by less than two figures, $\frac{6}{4}$. Cases may even occur in which the addition of an 8 is needed, as, for instance, in the organ-point at (*a*) in Example III; but these are rare.

Ex. III



In nearly all ordinary cases the figure 7 only is needed for the chord of the seventh, the addition of the third and fifth being taken for granted. Should the

seventh be accompanied by any intervals other than the third, fifth, and octave, it is of course necessary to specify them. Instances analogous to those we have already exemplified when treating of the common chord will sometimes demand even the insertion of a 3 or a 5, when the chord follows some other harmony on the same bass note. Such cases are very common in organ-points.

The inversions of the seventh are usually indicated by the formulæ $\frac{6}{5}$, $\frac{4}{3}$, and $\frac{4}{2}$, the intervals needed for the completion of the harmony being understood. Sometimes, but not very often, it will be necessary to write $\frac{6}{5}_{3}$, $\frac{6}{4}_{3}$, or $\frac{6}{4}_{2}$. In some rare cases the third inversion is indicated by a simple 4; but this is a dangerous form of abbreviation, unless the sense of the passage is very clear, since the figure 4 is constantly used, as we shall presently see, to indicate another form of dissonance. The figure 2, used alone, is more common, and always perfectly intelligible, the 6 and the 4 being understood.

The figures $\frac{9}{7}$, whether placed under the dominant or under any other degree of the scale, indicate a chord of the ninth, taken by direct percussion. Should the ninth be accompanied by other intervals than the seventh, fifth, or third, such intervals must be separately noticed. Should it appear in the form of a suspension, its figuring will be subject to certain modifications, of which we shall speak more particularly when describing the figuring of suspensions generally.

The formulæ $\frac{7}{4}_{2}$ and $\frac{9}{7}_{4}$ are used to denote the chord of the eleventh—i.e., the chord of the dominant seventh, taken upon the tonic bass. The chord of the thirteenth—or chord of the dominant ninth upon the

tonic bass—is represented by $\frac{7}{6}{}_{4}$ or $\frac{9}{7}{}_{6}{}_{4}$ or $\frac{7}{6}{}_{4}{}_{2}$. In these cases the 4 represents the eleventh and the 6 the thirteenth; for it is a rule with modern composers to use no higher numeral than 9, though in the older figured basses—such as those given in Peri's "Euridice," and Cavalieri's "Rappresentazione di anima e di corpo"—the numerals 10, 11, 12, 13, and 14 are constantly used to indicate reduplications of the third, fourth, fifth, sixth, and seventh in the octave above.

Accidental sharps, flats, and naturals are expressed in three different ways. A ♯, ♭, or ♮, used alone—that is to say, without the insertion of a numeral *on its own level*—indicates that the third of the chord is to be raised or depressed a semitone, as the case may be. This arrangement is entirely independent of other numerals placed *above* or *below* the accidental sign, since these can only refer to other intervals in the chord. Thus, a bass note with a single ♭ beneath it must be accompanied by a common chord with a flattened third. One marked $\overset{6}{\flat}$ must be accompanied by the first inversion of the chord of the seventh, with its third flattened. It is true that in some thorough-basses of the eighteenth century we find the forms ♯3, ♭3, or 3♮, but the figure is not really necessary.

A dash drawn through a 6 or 4 indicates that the sixth or fourth above the bass note must be raised a semitone. In some of Handel's thorough-basses the raised fifth is indicated by 5, but this form is not now in use.

In all cases except those already mentioned the necessary accidental sign must be placed before the numeral to which it is intended that it should apply; as

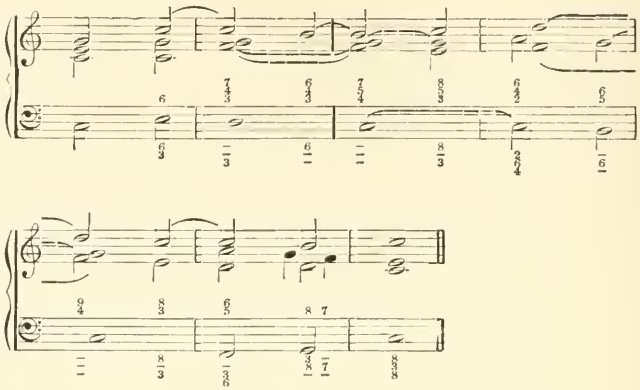
♭6, ♯7, ♮5, ♭9, ♭4, ♮4, ♮6, etc.; or, when two or more intervals are to be altered, $\frac{♭6}{♭4}$, $\frac{♭6}{♭}$, $\frac{♭7}{♭5}$, etc.; the figure 3 being always suppressed in modern thorough-basses, and the accidental sign alone inserted in its place when the third of the chord is to be altered.

By means of these formulæ, the chord of the augmented sixth is easily expressed either in its Italian, French, or German forms. For instance, with the signature of G major, and E♭ for a bass note, the Italian sixth would be indicated by ♮6, the French by $\frac{6}{4}$, the German by $♭\frac{♮6}{3}$, or $\frac{♮6}{♭5}$.

The employment of passing notes, appoggiaturas, suspensions, organ-points, and other passages of like character gives rise sometimes to very complicated figuring, which, however, may be simplified by means of certain formulæ that save much trouble both to the composer and the accompanist.

A horizontal line following a figure, on the same level, indicates that the note to which the previous figure refers is to be continued in one of the upper parts over the new bass note, whatever may be the harmony to which its retention gives rise. Two or more such lines indicate that two or more notes are to be so continued, and in this manner an entire chord may frequently be expressed without the employment of a new figure. This expedient is especially useful in the case of suspensions, as in Example IV, the full figuring of which is shown above the continuo, and beneath it the more simple form, abbreviated by means of the horizontal lines, the arrangement of which has in some places involved a departure from the numerical order of the figures.

Ex. IV



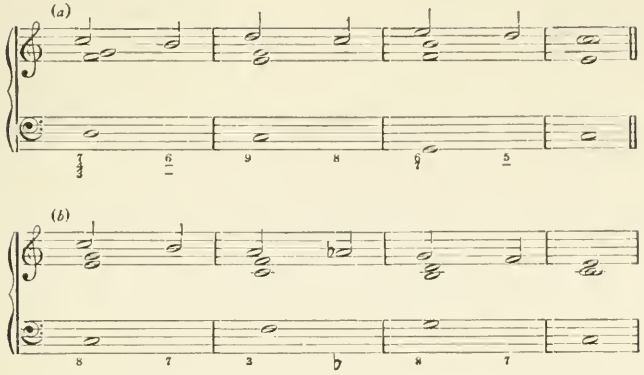
Any series of suspended dissonances may be expressed on this principle—purposely exaggerated in the example—though certain very common suspensions are denoted by special formulæ which seldom vary. For instance, 4 3 is always understood to mean $\frac{5}{4}$ $\frac{5}{3}$ —the common chord, with its third delayed by a suspended fourth—in contradistinction to $\frac{6}{4}$ $\frac{5}{3}$ already mentioned; 9 8 means the suspended ninth resolving into the octave of the common chord; $\frac{9}{4}$ $\frac{8}{3}$ indicates the double suspension of the ninth and fourth, resolving into the octave and third; etc.

In the case of appoggiaturas the horizontal lines are useful only in the parts which accompany the discord. In the part which actually contains the appoggiatura the absence of the concord of preparation renders them inadmissible, as at (*a*) in Example V.

Passing notes in the upper parts are not often noticed in the figuring, since it is rarely necessary that they should be introduced into the organ or harpsichord

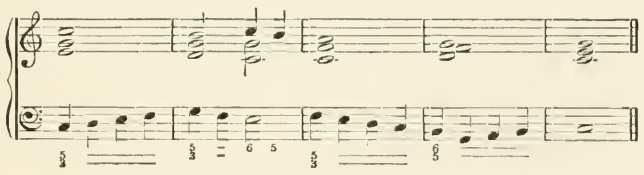
accompaniment; unless, indeed, they should be very slow, in which case they are easily figured in the manner shown at (*b*) in Example V.

Ex. V



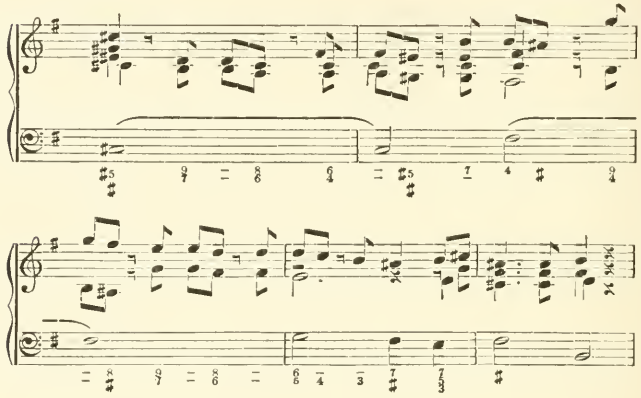
The case of passing notes in the bass is very different. They appear, of course, in the continuo itself. The fact that they really are passing notes, and therefore are not intended to bear independent harmonies, is sufficiently proved by a system of horizontal lines indicating the continuance of a chord previously figured; as in Example VI, in the first three bars of which the triad is figured in full because its intervals are continued on the three succeeding bass notes.

Ex. VI



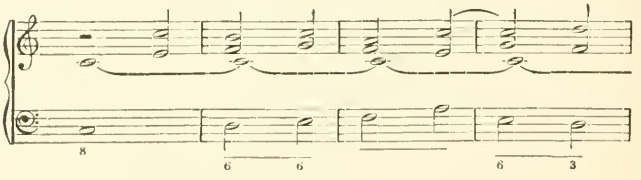
But in no case is the employment of horizontal lines more useful than in that of the organ-point, which it would often be very difficult to express clearly without their aid. Example VII shows the most convenient way of figuring complicated suspensions upon a sustained bass note.

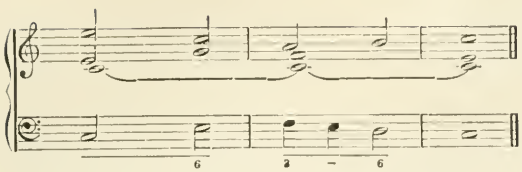
Ex. VII HANDEL



In the inverted pedal-point the lines are still more valuable as a means of indicating the continuance of the sustained note in an upper part; as in Example VIII, in which the figure 8 marks the beginning of the C, which, sustained in the tenor part, forms the inverted pedal, while the horizontal line indicates its continuance to the end of the passage.

Ex. VIII





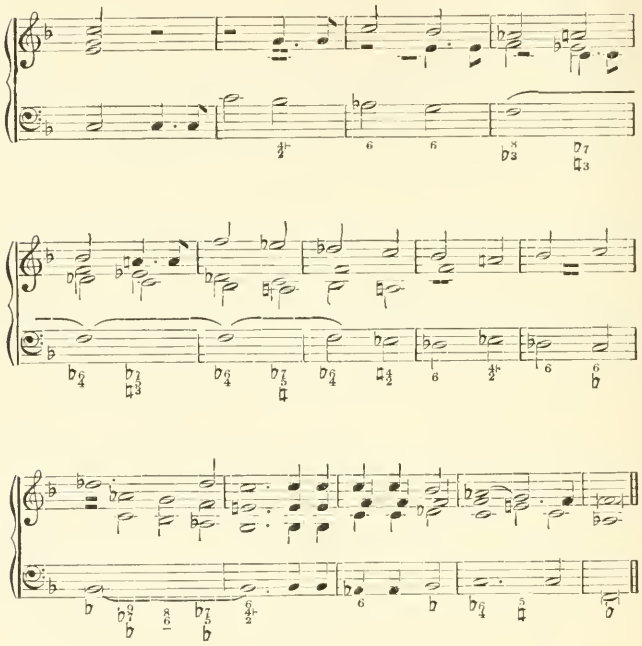
When, in the course of a complicated movement, it becomes necessary to indicate that a certain phrase—such as the well-known canto fermo in the "Hallelujah Chorus"—is to be delivered in unison, or at most only doubled in the octave, the passage is marked *tasto solo,* or T. S.—i.e., "with a single touch" (= key). When the subject of a fugue appears for the first time in the bass, this sign is indispensable. When it first appears in an upper part, the bass clef gives place to the treble, soprano, alto, or tenor, as the case may be, and the passage is written in single notes, exactly as it is to be played. In both these cases it is usual also to insert the first few notes of the answer as a guide to the accompanist, who only begins to introduce full chords when the figures are resumed. In any case, when the bass voices are silent the lowest of the upper parts is given in the thorough-bass, either with or without figures, in accordance with the law which regards the lowest sound as the real bass of the harmony, even though it may be sung by a soprano voice. An instance of this kind is shown in Example IX.

Ex. IX HANDEL

We shall now present a general example, serving as a practical application of the rules we have collected

together for the reader's guidance, selecting for this purpose the concluding bars of the chorus "All we like sheep," from Handel's "Messiah."

Ex. X HANDEL



The figuring here given contains nothing which the modern professor of harmony can safely neglect to teach his pupils. The misfortune is that pupils are too often satisfied with *writing* their exercises, and too seldom expected to *play* from a thorough-bass at sight. Many young students could write the figured chords correctly enough, but few care to acquire sufficient

fluency of reading and execution to enable them to accompany a continuo effectively, though this power is indispensable to the correct rendering, not only of the works of Handel and Bach, but even of the oratorios and masses of Haydn and Mozart, the latest great works in which the organ part is written on a single stave.

CHAPTER XII

COUNTERPOINT

Origin—Organum and Faburden—Bach—Trend of Modern Music—The Obbligato—Bad Effect of Too Much Complexity—Species of Counterpoint—Modern Examples of Counterpoint—Old Church Composers—English Composers—Croft—Necessity for Breadth of Culture.

WHERE and when counterpoint began are matters of conjecture. It is unimportant, however, though the fancy likes to picture a romantic origin for art-forms. We are willing to accept the guesses of the historians quoted by Naumann that Paris was the cradle of counterpoint. Certain it is that when the organum and the faburden, the harbingers of counterpoint, first made themselves felt in the musical world, Paris was the center of European culture. Here, then, on the banks of the Seine, let us date the birth of counterpoint a thousand years ago.

In the year 1750 Johann Sebastian Bach, by whom all the science and art of his predecessors was carried to incomparable heights, passed from earth. Since Bach's day counterpoint has abdicated the throne and is now only a citizen in the democracy of music. Melody, harmony, dynamic effects, variety of rhythms, orchestral color, have more to do with the nature of modern music than counterpoint has. The archaic counterpoint of early days was uninfluenced by the harmonies that the tempered scale has made possible.

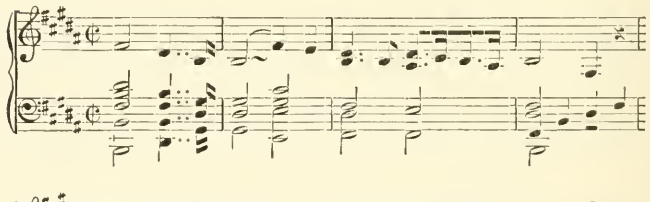
It lacks color and passion. It is the child of the cold gray stone cathedral, and needs the echoes of the high-arched roof, the shadowy distance of the long-drawn aisle, the Latin liturgy—everything, in fact, that tends to separate the humble devotee from the sanctity of the priest. The trend of music has ever been toward expression; it no longer separates. The music we esteem to-day is that which makes the most direct appeal to our emotions. From this modern art counterpoint is not excluded, but it is not the counterpoint of our forefathers that composers now employ.

Counterpoint is the art of combining two or more melodies (or themes, phrases). Whenever the accompaniments of a melody are so constructed that they stand out clear and distinct from the melody as independent melodies themselves, the effect is contrapuntal to the hearer. A familiar use of free counterpoint is in an obbligato to a song. Some of the finest counterpoint, however, is so smoothly written and of such complexity that the ordinary uncultured ear cannot distinguish any theme or sense in such a babel of conflicting voices, each one clamoring for the attention. To an uneducated ear the melodic, harmonic, and emotional beauty of Bach's unapproachably perfect fugue in C sharp minor, No. 4 of the "48," is lost in the maze of the five-voiced counterpoint. The simplest song or dance in balanced four-bar phrases seems richer in melody.

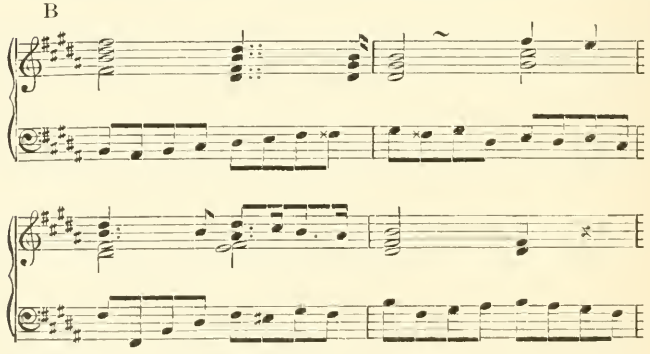
It does not require much attention for the listener to notice that when Wagner, in the second half of the "Tannhäuser" march, repeats the principal theme of the first part he elaborates the bass, giving it a melodic importance that it did not have in the first part. In

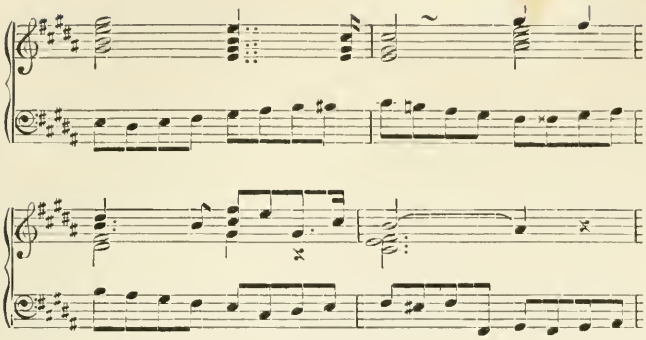
the first part the bass is only an unobtrusive part of the harmonies that accompany the all-important melody. In the second part the shorter note-value and the continuity of the melodic flow of notes in the bass make the bass almost equal in importance to the theme. In other words, the bass in the second part is a counterpoint to the melody; the bass is contrapuntal. The example A shows the first two phrases that together make half of the first sentence of this march. B is the same half-sentence with the contrapuntal bass.

A



B



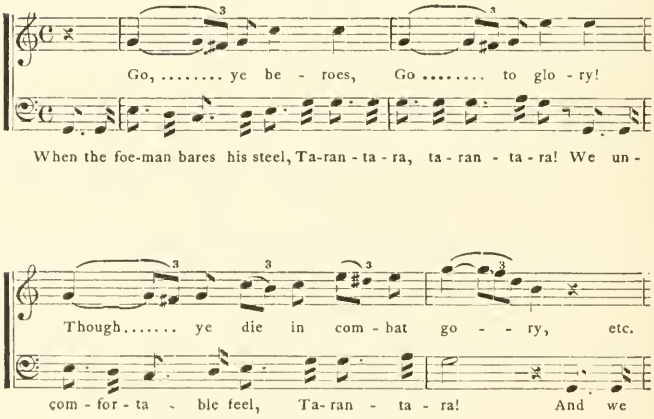


There are several species of counterpoint classified in treatises. As exercises, the systematic study of these species is of value, but the only counterpoint that modern composers make any extensive use of is the species known as florid counterpoint. This species of counterpoint is easily distinguishable by its notes of unequal length, by tied and dotted notes, and by rests. The counterpoint in the "Tannhäuser" example B is not florid; it is of the third species. Space forbids an explanation of the five species of counterpoint, of which florid is the last. A treatise on counterpoint would fill a large volume. Nothing but the briefest description of what counterpoint is can be outlined here.

In addition to this simple counterpoint, of which all the examples quoted in this chapter are instances, there is also double counterpoint. Double counterpoint is the art of so constructing a contrapuntal passage that it can be sounded either over or under the theme it is intended to accompany. The art of double counterpoint has fallen into disuse in these days of harmony

and orchestral color. Not only in the works of Bach, but in almost all fugues, double counterpoint is more or less in evidence. In the fugue in Cherubini's requiem mass in C minor we find an excellent example of triple counterpoint. The three themes are so constructed that each one in turn may appear above, below, or between the other two.

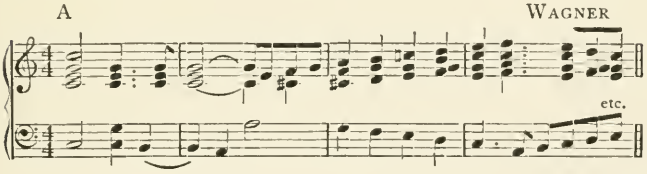
Sir Arthur Seymour Sullivan sometimes lent considerable zest to the movements in his humorous operettas by causing two themes which had previously been heard separately to be heard together. An amusing instance of this procedure is to be found in the third number of the second act of "The Pirates of Penzance." The Sergeant's song "When the foeman bares his steel" is followed by Mabel's solo "Go, ye heroes, go to glory." Later on in the same scene the two melodies are combined thus:



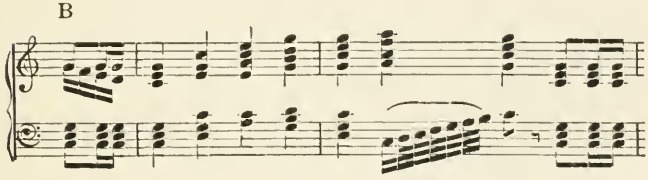
With an orchestral accompaniment and a chorus of girls this counterpoint is very effective on the stage. Sullivan employs this same contrapuntal device in the chorus "Now glory to the God who breaks," in "The Martyr of Antioch." In both these examples the composer has been careful to give each theme a characteristic and contrasting rhythm. The triplets of Mabel's song are easily distinguishable from the angular rhythm of the Sergeant's phrases. Sullivan had too fine a sense of the fitness of things to employ any but the least complex counterpoint in his sparkling operettas.

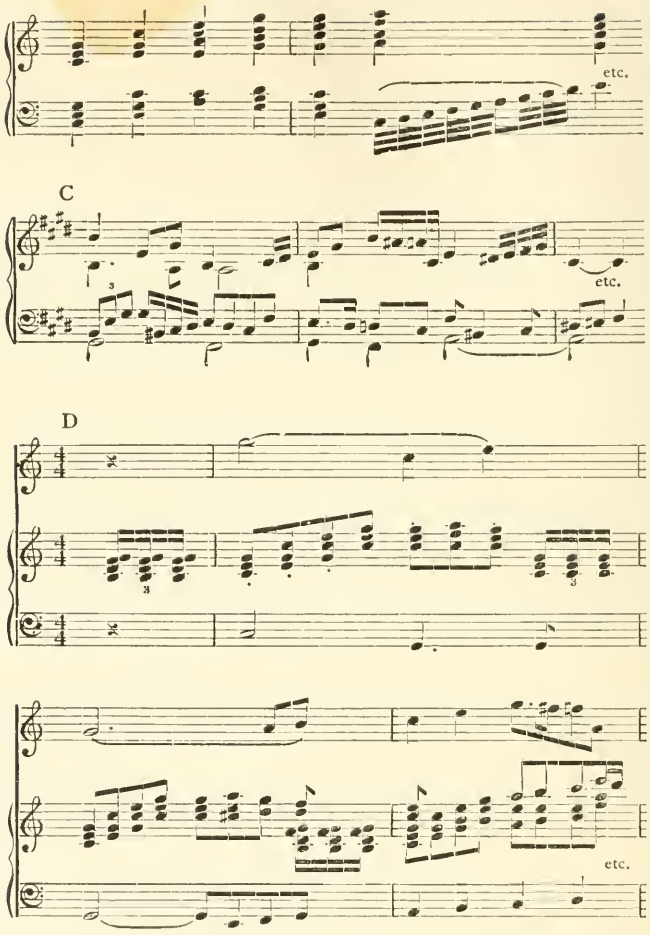
In the overture to "Die Meistersinger" Wagner has most felicitously combined three themes that have each been treated separately before they are heard simultaneously. This is one of the finest specimens of modern counterpoint extant. Examples A, B, and C are the first few bars of the themes which are afterward so skillfully and delightfully combined in example D.

A



B





This complexity is not difficult to follow when the themes are known. The theme C, in notes of double length, is the upper melody, and is therefore the easi-

est to be distinguished. The theme A is in the bass, which is the next easiest part for the ear to hear; while theme B is ingeniously written in notes of half the time-value of those that first announced it, giving it a rhythmical contrast to the themes A and C.

The old Church composers of the eighteenth century thought less about clarity. They wrote for a public familiar with contrapuntal devices, and they frequently let ingenuity outstrip inspiration. Much of their eight-part counterpoint is so closely interwoven that the ear cannot follow the melody of each voice. Too great a complexity defeats its own ends. At a distance from the eye a fine piece of silk looks less complicated than a few twisted strands of rope. And Wagner's comparatively simple combination of three themes sounds richer and more complex than that music which is composed of a very great number of themes so closely fitted that the ear cannot separate one from the other.

But it must never be forgotten when judging, and possibly condemning, the old Church composers that they were invariably imbued with a progressive spirit, and that they made use of the utmost resources of the imperfectly developed art of their day. In Thomas Tallis and William Byrd the old English polyphonic school had two great masters of the art second only to the Italian Palestrina. Those two contrapuntists were neither equaled by any German of their times nor surpassed by the Netherlanders. The influence of Tallis was so great that when he, by way of experiment or for the sake of variety, composed a simple service in a Doric mode, his followers accepted this as a model for Church services. And so it came to pass

that for a long time the English Church service was most orthodoxly dull and gloomy. Orlando Gibbons restored the polyphonic style to the service, and made it bright and melodious. Purcell, probably the greatest musical genius of whom England can boast, was somewhat under the French influence in his services. His greatness must be sought in those forms which allow freer play of imagination and dramatic expression.

Unquestionably the finest examples of the English Church service date from the beginning of the eighteenth century. In 1727, exactly one hundred years before the death of Beethoven, Westminster Abbey received the ashes of William Croft. Croft could not soar among the stars with Beethoven, but nevertheless he wrote the finest Te Deum and Jubilate to be found in the English service. In these, and in his anthems "Cry aloud and shout" and "God is gone up with a merry noise"—to mention only two of his many excellent choral works—we find masterly workmanship, fine feeling, and a breadth and power exactly proportioned to the form and dimension of the work. The successors of Croft have been too frequently orthodox and conservative. Like the followers of Tallis, they heed the manner of the past, and do not attempt to enrich the service from the new resources of music. There are notable exceptions, though many of these exceptions are weakly sentimental, rather than strongly modern.

Schumann is credited with saying that his development began when he got it into his head that there were other countries than Germany in the world. And it is doubtless good for a little man from Ulm, Rouen,

or Durham, when expatiating in the turmoil of Chicago on the glories of his cathedral music, to be shocked with the question, "Where is Durham?" There are other worlds of music than the one in which we move. Explore them. It cannot be denied that much of the old music is too contrapuntal. Counterpoint had then but recently reached maturity, and composers reveled in their new-found art. The melodic school of Italy neglected everything for the sake of pretty tunes. When the sonata form was new, Mozart put many compositions on paper that are only of the slightest musical value except as excellent examples of balanced sonata form. When the history of our times is written, it will be stated that the composers of the latter part of the nineteenth and the early part of the twentieth centuries too frequently neglected balance of form, contrapuntal skill, and thematic development for the sensuous charm of rich harmonies and brilliant orchestration.

Counterpoint will always keep its place as one of the most important factors in the upbuilding of a great musical work, but it is improbable that it will ever regain the position of supreme importance which it held in the eighteenth century.

CHAPTER XIII

IMITATION, CANON, AND FUGUE

Composers of the Contrapuntal Epoch—Too Great Attention to External Merit—Subjective and Objective—Glareanus—Palestrina to Handel—Imitation and Imitative Passages—Canons—The Flower of Counterpoint is Fugue—Fugal Style and Structure—Fugue and Cadences—Bach's Violin Sonatas—His Organ Fugues—Mozart's Wonderful Skill—Modern Oratorio and Fugue—The Fugue and Modern Expression.

THE academical spirit of the eighteenth century in letters was tersely expressed by Voltaire in his strictures on the blank verse of Shakespeare: "If you remove the labor, you remove the merit." The composers of the contrapuntal epoch in music were imbued with the same esteem for the external signs of workmanship. Now these external merits are but the trappings and the jewels of the spirit of the poem or the song. The music of Dante's marvelous three-rhymed "Divine Comedy" is the sweeter for the cadence of its rhyme, but Dante's crown of unfading glory rests on a firmer foundation than the jingle of his lines. Bach's fugues are also marvels of constructive skill, though the amazing complexity of the forgotten mathematics in sound of the Netherland composers would oust them from their foremost rank if external labor were the touchstone of merit. The purity of style and perfect rhymes of Voltaire's plays have not prevented

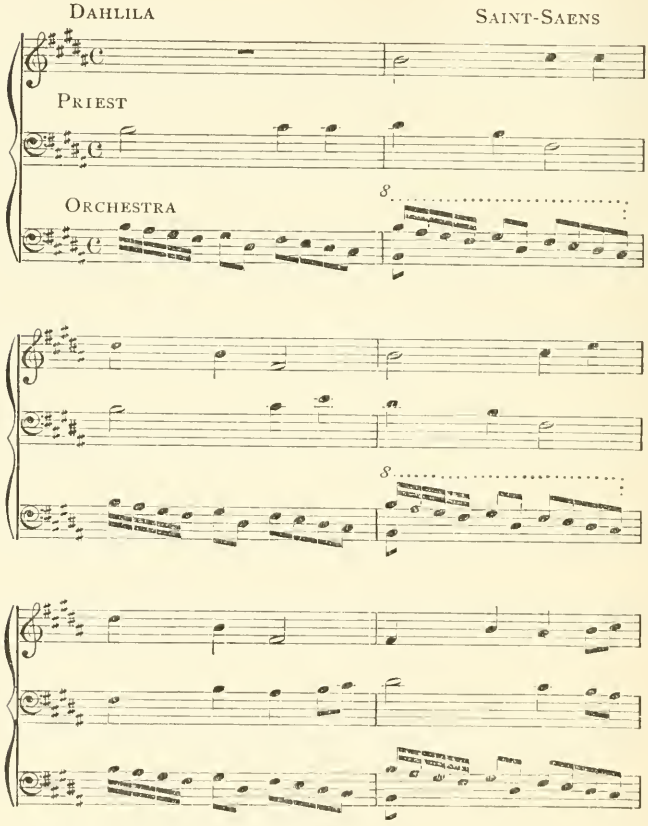
this wittiest of authors from ignominious neglect by the world of playgoers. Rhyme in poetry and form in music are largely products of the objective factor in the brain; that is to say, the intellectual faculties, which faculties can be directed by the will. The character, spirit, soul—call it what you will; it is usually called the inspiration of the poem or the composition —is the product of the subjective factor of the brain. This subjective factor is not under the control of the will.

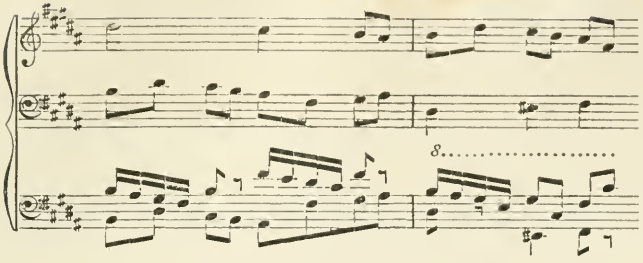
Among the old contrapuntists the intellectual factor often seriously interferes with the suggestive factor. Henricus Glareanus, in his "Dodekachordon," published in 1547, tells us that it required two men to compose a piece of music—one to invent the tune, and another to write the counterpoint. It is evident that the objective and subjective were not combined in the mind of any composer with whom Glareanus was acquainted. Yet the old author was shrewd enough to say that it might be possible to combine the two functions of melodist and contrapuntist in one person.

In 1547 Palestrina was a young student in Rome; in 1658 Purcell was born in London; in 1685, within a few days and a few miles of each other, Bach and Handel were born in Saxony. The speculative theory of Glareanus was not rash, though it may have been novel in his day. Palestrina, Purcell, Bach, and Handel, and a hundred excellent composers, from the birth of Palestrina to the death of Handel, are irrefutable evidence that the functions of melodist and contrapuntist can be combined in the selfsame mind.

One of the earliest forms of contrapuntal ingenuity

is imitation. Imitation is a term that is not very precise in its definition. Sometimes only the rhythm is imitated, and frequently the imitating melody varies considerably from the part imitated. If the imitation is note for note the same as the melody it is called a canon. The subjoined example is a canon in the octave:



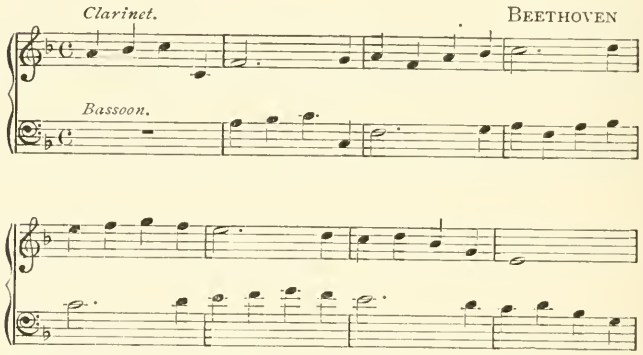


Canons can be written with the imitating part beginning at any interval from the melody as well as from the octave. The imitating part will then not be note for note as the melody, as it is in canons in the octave and the unison. If the canon or the imitation is in the tenth, for instance, every note of the imitating part will lie a tenth above the notes of the melody that are being imitated. It is usual to reckon intervals upward. This will explain why a canon that begins on G, with the imitating part starting on the E under the G, is called a canon in the sixth. Not all contrapuntists follow this nomenclature, however. In the ascending scale E is a sixth above G, therefore it is called by many a canon in the sixth.

There are also canons in several voices; canons on several subjects; canons in which the imitating part is inverted—that is to say, upside down; canons in which the imitating part is in notes of shorter or longer time-value than the notes of the leading melody. In fact, there seems to be no end to the mathematical possibilities of imitation. The reason why it is now dead as an art-form is that it makes such a great demand on the ordinary intellectual faculties of the brain that the more sensitive and rarer subconscious factor is

overwhelmed and silenced. The bright lance of inspiration is shattered by the leaden mace of reflection.

Here and there in the works of modern composers are to be found musical examples of imitative passages. The seventh number of Sir Alexander C. Mackenzie's "Jason" contains a melodious vocal canon; Schumann's "Études symphoniques" for piano abound in imitative passages. One of the most genial of the many sportive, half-humorous pages that Beethoven wrote is the imitation in the octave between the clarinet and bassoon in the first movement of the Fourth symphony:



This is strict imitation, and is therefore a canon of eight bars' length. The last movement of César Franck's sonata in A for piano and violin is one of the most beautiful imitative movements in existence.

Bach, of course, did everything. In his "Goldberg" variations there are canons in the unison, second, third, fourth, fifth, sixth, seventh, octave, and ninth. Of these the example in the interval of the fifth is in

contrary motion. These canons are not haunting in their emotional beauty. The subjective factor in Bach's brain was recuperating for the creation of one of his profoundly felt and tenderly expressive choral masterpieces when his incessantly active mind vented its energy in these constructive problems.

The seeker for external perfection of canonic skill is referred to the masterly feat of August A. Klengel, whose forty-eight canons and fugues in all keys are monuments of patient thought and elaboration.

Counterpoint is the plant of which fugue is the flower in its full perfection. Counterpoint can go no farther than the production of a fine fugue. The fugue contains simple and double counterpoint, imitation, canon, as well as its own characteristic form. A fugue is a composition in which a certain phrase called the subject is announced and discussed by a number of voices in turn, separately and simultaneously, according to the elaborate but not rigid rules of fugue.

In a typical fugue we might have a construction in which the exposition is made thus: A short characteristic phrase is announced by the soprano part in the tonic; the alto gives the answer, which consists of the subject in the dominant instead of in the tonic. The tenor now announces the subject again in the tonic, and is followed by the bass with the answer in the dominant. The soprano, alto, and tenor having entered in turn with the characteristic phrase, continue with free counterpoint until the end of the subject in the bass. When the bass enters there will therefore be four voices sounding at once, each one with an independent counterpoint.

At the end of this exposition there will be an episode, which is a passage of a few bars wherein the subject is absent. Episodes usually contain phrases that resemble parts of the exposition, though the subject itself is omitted. During this episode, and during the counter-exposition which follows it, one or more of the four voices, either instrumental or vocal, will become silent. This allows the voice that has dropped out to enter with effect when it is its turn to state the subject or answer in the counter-exposition. In the counter-exposition the composer contrives that the voices enter in a different order than in the exposition. The voices that had the subject in the first part will now have the answer in the second part. At the end of the counter-exposition there is a longer episode, followed by a free treatment of the subject as the fancy of the composer suggests. Other keys than the tonic and dominant are here introduced, and the subject is heard in its entirety or in fragments with new harmonic accompaniments, inverted, augmented, and diminished. The remainder of the fugue consists of the strettos and various episodes. In the strettos the subject is treated to canonic imitation which brings the entry of the imitating voice each time nearer the imitated notes of the subject.

Few fugues contain all these treatments. Some fugues have no counter-exposition, some have no stretto. Some fugues have more than one subject; some have a counter-subject which accompanies the subject every time it appears.

The fugue avoids full cadences. If one should appear, the subject will enter at the same time and continue the movement. It is not difficult to distinguish

a fugue from a canon. In a canon every note in the leading voice is imitated by every note in the imitation that follows it like a slanting shadow to the end. In a fugue a short subject is heard here and there in a number of voices that make no attempt to imitate each other.

Bach was the greatest scientist, as well as the greatest artist in fugues, that the world has yet seen. He bound himself in the most unyielding of fetters and moved with the freedom of an acrobat.

For the solo violin, with its exceedingly narrow limits of harmony and double notes, he wrote fugues, preludes, chaconnes, with a rhapsodical fire and brilliancy that compel the applause of the concert-room today when the master of the violin appears who can do them justice. The stiff forms are masked in ornament, like steel armor damaskeened in purple and gold. The first of organists in his day, and the acknowledged king of all contemporary and subsequent composers for his favorite instrument, he has bequeathed to the world such a legacy of organ fugues that the musician hardly knows whether the quantity or the quality is the more amazing.

With every decade greater organs are constructed. But the mightiest organ has not yet found the limit to the breadth and grandeur of Bach's organ fugues. For the clavier, which had its exit with the entrance of the modern piano, Bach was lavish of all kinds of fugues. His "Art of Fugue," a book written to show what can be done with a theme, is unquestionably dry and technical. In the famous "Well-tempered Clavichord," which Bach wrote to help forward the then imperfectly understood equal temperament, he presented

some of the most beautiful of his musical utterances. Humor, pathos, dignity, and power are all to be found in these unapproached and unapproachable fugues. They are like the wild flowers that spring from the arid soil of the stony wayside. The vine and tendril and bloom of melody clasp and cloak the gnarled trunk of counterpoint.

Among all the singers, romancers, colorists, and wooers of Penelope to-day there are none who can bend the contrapuntal bow of this Ulysses of music.

Mozart has deftly combined the fugue and the sonata forms in his overture to "The Magic Flute," and in the last movement of the great C major symphony, which his contemporary admirers surnamed "The Jupiter." With such remarkable skill are these two forms welded that it would be impossible to find the seam if the cadences of the sonata form did not interrupt the flight of the fugue. They resemble the architecture of the Incas, of which Prescott tells us that the stones were so neatly fitted that the eye might not detect the joint if the fluting was removed.

The fugue has not been modernized. It is difficult to introduce it in modern works without a glaring mixture of old and new styles. The fugue at the end of Beethoven's "Mount of Olives" is less inspired than the majestic "Halleujah" chorus which precedes it. It is more formal and old-fashioned in style, and is a labored product of the intellectual faculties, rather than a spontaneous creation of Beethoven's genius. Thirty-two years after the production of "The Mount of Olives," the most popular and most dramatic oratorio since the days of Bach and Handel, Mendelssohn's "Elijah," was given to the world. Mendels-

sohn, in his instrumental pieces, has caught a good deal of the infection of Weber's romantic spirit. In his choral works the influence of the older classical composers is more noticeable. The fugue had long ceased to be an essential feature in instrumental compositions, though Church music and those choral works which are founded on Biblical stories remained, and still remain, far behind instrumental works in modernity of style. Yet the fugal style plays a very subordinate part in the "Elijah."

Twenty-two years after "Elijah" was first given Wagner produced his "Meistersinger." The introduction to the third act of this most perfect and magnificent of all comedy operas may some day be referred to by the future historian as the germ of the fugue renaissance. The theme that begins the introduction—a phrase that could do admirably for a fugue subject—is taken up in turn by four voices—instrumental voices—as in the exposition of a fugue. The difference is in the keys in which the voices enter, and in the richness of the modern harmonies which these combined voices produce.

A fugue containing all the interesting devices of structure of the classical fugue combined with modern harmony, and expressing the emotion of the romantic spirit in music has not yet appeared. Wagner's poetical reverie is not a fugue. And the fugues of Wagner's contemporary Joseph Rheinberger are modern only because they are new.

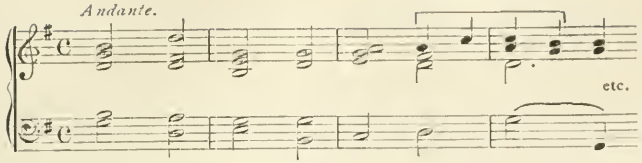
CHAPTER XIV

CADENCES

Various Ways of Ending—Harmonic Progression—Proportion and Balance—Function of Cadences—Untrained Ear Unreliable—Perfect and Plagal Cadences—Imperfect Cadence—Modern Methods—Berlioz and Richard Strauss—Variety in Cadence.

CADENCE in music means an end. In music, as in poetry, there are various ways of ending. It stands to reason that it is impossible to classify every harmonic progression that will serve as a cadence. Each composer tries to get a new ending for his phrases, sentences, and compositions. Even if it were possible to invent new harmonic progressions on every occasion, cadences would still resolve themselves into two distinct classes, those which are completely satisfactory as ends, and those which require a continuation of the musical phrase to finish the sentence.

Those cadences which are *final* should be called perfect, though the name perfect is usually applied to a certain fixed progression that is not always a final cadence. Those cadences which demand a continuation should be called imperfect. An ending that is final in one place may be only a momentary pause in another environment. In the following hymn from Gluck's "Iphigénie en Tauride" a perfect or full cadence is to be found at the beginning of the fourth measure:



This phrase is not satisfactory alone, even with the perfect end. The reason is that the musical idea is not completed. If we take Poe's line—

Ah, distinctly I remember, it was in the bleak December,

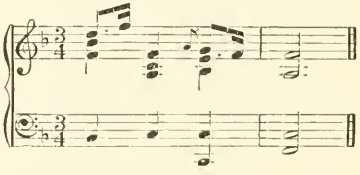
we have a sentence containing a definite idea. Yet this sentence, though capable of being parsed, is hardly more satisfactory than the hymn. In both instances we expect more; our sense of proportion and balance is not contented. One line of a poem and one phrase of a composition may be interesting as studies, as a foot and a hand are to draughtsmen, but a work of art must present the unmutilated figure in its perfection.

Now the function of cadences is to indicate the ends of the sections or phrases of which a musical sentence is made. When the requisite number of phrases have been put together, and the judgment of the composer tells him it is time to stop, there are many ways of ending. As no composer has yet found an agreeable way of finishing with a chord that is not a tonic chord for the time being, it has become a rule that a final cadence must end with the chord of the tonic in its root position. As by far the greater number of final cadences in all musical works consist of a tonic chord preceded by a chord of the dominant, it has come to pass that a cadence consisting of a chord of the dominant followed by a chord of the tonic in its root position is called a perfect or full cadence. Examples can

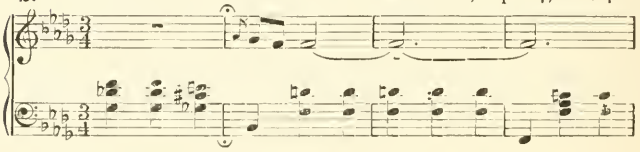
be found in the works of the great composers of this perfect cadence on every beat or accent of the measure. Instinct is the only rule that has told them when and where the end should be. Everything is regular, and nothing is wrong that sounds right. It cannot be too emphatically stated, however, that the untrained ear of the tyro is an altogether unreliable guide. An effect is unquestionably good if the wonderfully fine ear of a great composer sanctions it. But the beginner may be pleased with trite and vapid progressions that are detestable to the mind that has experienced "an unfolding of musical faculty." Zeal and judgment are often antagonistic. Zeal for judgment is the only means the composer has to develop an unerring instinct for cadences.

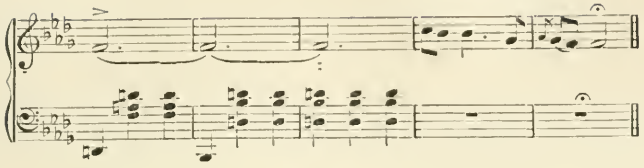
The following final cadences differ from each other in every respect except that they all end with the tonic chord in the root position. The first one has been adopted unaltered in melody by Mozart in numberless instances, as well as in the harmonic progression which is common property.

1. GLUCK Air in "Alceste"

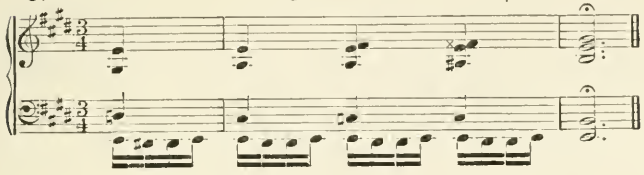


2. CHOPIN Mazurka, Op. 24, No. 4

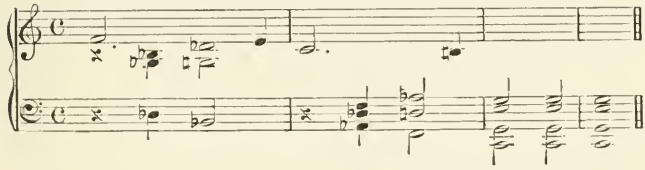




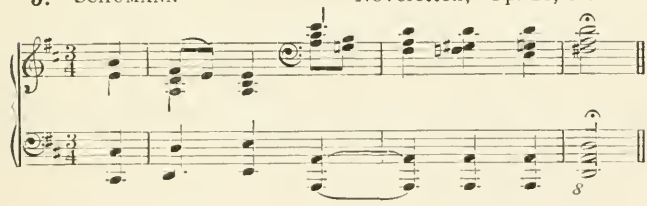
3. LISZT Song, "Thou who from thy realms"



4. GRIEG Song, "Du bist der junge Lenz"

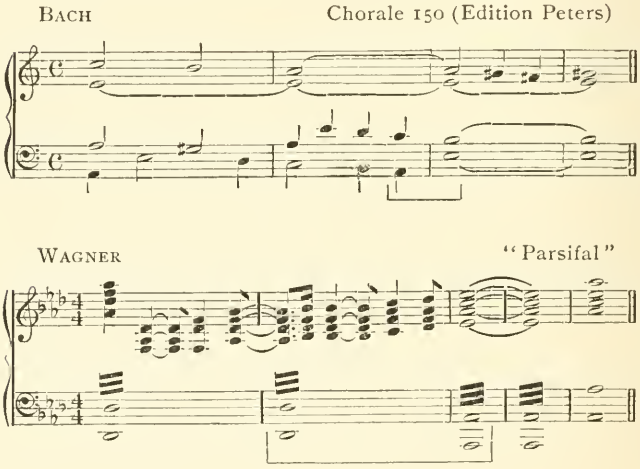


5. SCHUMANN "Noveletten," Op. 21, No. 8



There is another form of perfect cadence that was formerly more in use than it is at present. It consists of the progression from the subdominant to the tonic, and is known as the plagal cadence. It survives in the Amen with which it is the conventional practice to

end hymns in the English Church service. Composers rarely employ it to-day in its bald simplicity. They vary it by adding other notes and by inverting it. The cadence then loses its austere character and can hardly be called plagal. The example from Grieg (No. 4) is more like a plagal than a perfect cadence, though it is neither. The two examples next given are from the works of widely different schools and epochs: Bach's chorale in a kind of modified Phrygian mode, and the final harmonies of Wagner's last music-drama.



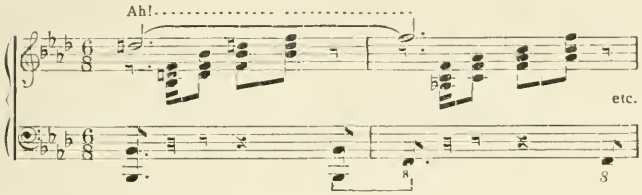
When the tonic chord is major the preceding subdominant is usually major, but a minor subdominant followed by a major tonic is not uncommon. It was formerly the custom to end minor compositions with the tierce de Picardie, a tonic chord with its third made major by means of an accidental. The Bach chorale quoted above is an example of this cadence.

THE MUSIC-LESSON

From the Painting by Sir Frederick Leighton

If a movement in a minor key ends with a plagal cadence the chord of the subdominant is almost invariably minor. A major subdominant followed by a minor tonic is very rare. The Siciliana in Mascagni's "Cavalleria Rusticana" is most effectively concluded with the unusual cadence that follows:

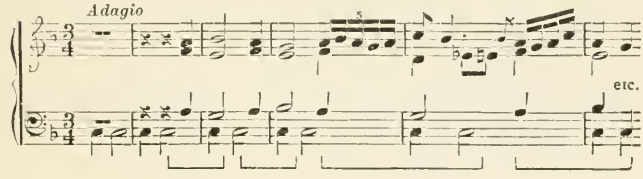
MASCAGNI "Cavalleria Rusticana"



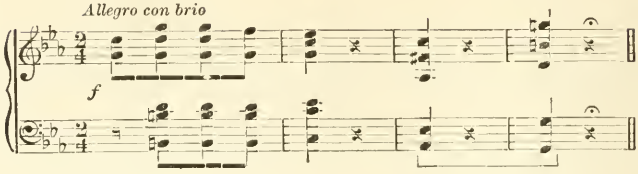
A fine treatment of the plagal cadence is to be found at the end of the twelfth number of Beethoven's "Missa Solemnis." Chopin ends one of his most fascinating and haunting melodies, the étude in E major, Op. 10, No. 3, with the plagal cadence.

The reversed perfect cadence, a progression from the tonic or some other degree of the scale to an end on the dominant, is called an imperfect cadence or half-close. The distinctive feature of the half-close is the ending on the dominant. In the appended examples of the imperfect cadence or half-close it will be seen that the dominant is preceded by the tonic in the first quotation only.

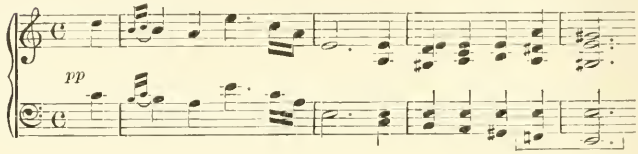
1. BIZET Suite "L'Arlésienne"



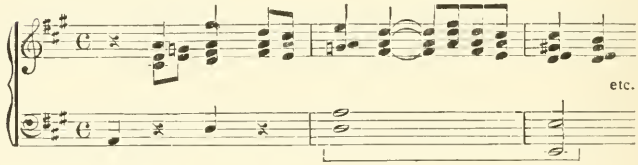
2. BEETHOVEN — Symphony V



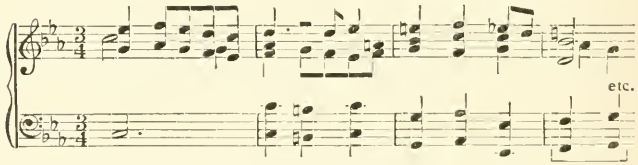
3. SCHUBERT — Sonata in A minor



4. SAINT-SAËNS — "Samson et Dalila"



5. PURCELL — "Dido and Æneas" (1680)

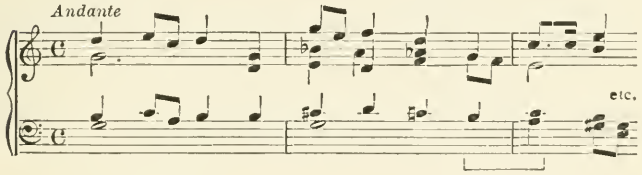


Interrupted or deceptive cadences are those terminations of a phrase which unexpectedly go to some other degree of the scale than the expected tonic. The detractors of Wagner waxed wroth at the variety of deceptive cadences the aggressive reformer hurled at their ears. Yet the deceptive cadence, or, as some call

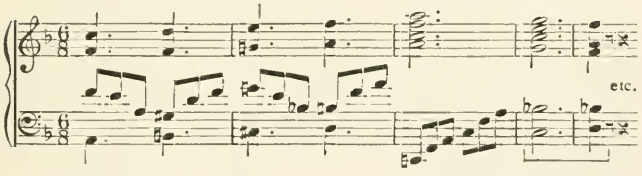
it, the interrupted cadence, is no new thing. It is to be found frequently in the works of the earliest composers. In the classical period from Bach to Beethoven, the commonest—in fact almost the only—form of deceptive cadence employed was the progression from the dominant to the submediant.

Since the advent of Wagner in particular, as well as of other modern composers, it is ordinary practice to quit the dominant for any harmonic destination whatsoever. The three subjoined quotations will suffice. The example from Brahms's third symphony is the usual form of a deceptive cadence, a progression from the dominant to the submediant.

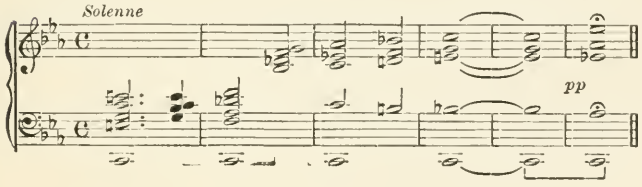
1. BRAHMS — Symphony in F, No. 3



2. HUMPERDINCK — "Hänsel und Gretel"



3. ELGAR — "The Apostles"



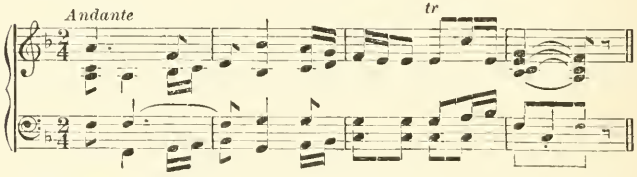
Composers frequently put the perfect, plagal, imperfect, and deceptive cadences on an unchanging bass note. This note is either the tonic or the dominant. There is no reason why other notes than the tonic and dominant should not be used, provided the composer finds a way of making them agreeable to the ear. In phrases that have feminine endings Beethoven frequently sounds the tonic bass under the dominant harmony in his perfect cadences. A feminine ending in music is rhythmically identical with a feminine termination in poetry—it is a weak accent following a strong. The line

Ah, distinctly I remember, it was in the bleak December,

contains two feminine endings, "remember" and "December." The strong accent falls on the second syllables, which are followed by weak third syllables.

The following example shows the employment of dominant harmony on a tonic bass in a perfect cadence with a feminine ending:

BEETHOVEN Sonata for Violin and Piano, Op. 47



No progression is called a cadence unless it ends a phrase. The four progressions from tonic to dominant in the Bizet quotation above are not four half-closes. It is only the fourth that is cadential; the others do not end phrases.

Schumann, who did many daring things as a har-

monic innovator, ends the first of his "Dichterliebe" songs with a dominant seventh chord. This is not unsatisfactory if it is followed by the next song, as the composer intended. The third of Berlioz's "Les nuits d'été" song cycle, Op. 7, ends with the triad on the dominant. The result is by no means unsuitable to Théophile Gautier's poem. The boldness of Berlioz has been surpassed in our day by Richard Strauss. In his works are to be found many remarkable cadences. The song "Wenn," Op. 31, and the symphonic poem "Also sprach Zarathustra," have characteristic Strauss ends. To the song the composer has added the ironical footnote: "If this end is disagreeable to the musicians of the nineteenth century, let them transpose it." The chord of B major high above the low bass note C is fittingly enigmatical as an end to the sayings of Zarathustra, though the outraged classical purists would gladly dedicate Strauss and his nefarious scores to that purifying element of the Zoroastrian religion of ancient Persia—fire!

If variety in cadence is desired, the sanest and most satisfactory procedure is to elaborate the harmonies and unsettle the tonality immediately before ending with a perfect cadence. The effect of the return to the dominant and tonic will be startling, dull, commonplace, or delightful, according to the skill with which the composer comes to the surface again after his plunge into the fathomless sea of harmony.

CHAPTER XV

INSTRUMENTATION

Influence of New Instruments in the Development of Orchestration—Why "Additional Accompaniments" are Irreverent—Variety in Color Results from Judicious Blending of Contrasting Elements—Wagner's Intimate Knowledge of the Orchestra.

INSTRUMENTATION is the art of adapting musical ideas to the varied capabilities of stringed, wind, keyed, and other instruments. It is scarcely possible to overestimate the influence exercised by this branch of technical science upon the advancement of modern music. The modifications through which it has passed are as countless as the styles to which it has given rise; yet its history, as recorded in the scores of the great masters, proves the principles upon which it is based to be as unalterable as their outward manifestation is, and always must be variable, and subject to perpetual progress.

Unaccompanied vocal music, however marked may be the differences existing between its individual schools, must perforce remain permanently subject to the laws imposed upon it by the character of the human voice. For instrumental music no permanent legislation is possible. Every new instrument introduced into the orchestra influences, more or less, every one of its companions. Every improvement in the form, compass, quality of tone, or executive powers of the

instruments already in use suggests new ideas to the composer, and results in an endless variety of new combinations. To the number of such improvements there is no limit. Stringed instruments, it is true, change but little, except in the manner of their handling. The violin of to-day is the violin of two centuries ago. Not so the wind instruments. The trumpet now in common use differs almost as much from that with which Handel and Bach were familiar as it does from the organ stop to which it lends its name. The flute as known to Haydn and Mozart could scarcely hold its own, except in the upper octave, against half a dozen violins. The tone of its modern successor is as powerful as that of the clarinet, and brilliant enough to make itself heard with ease through the full orchestra; its powers of execution are almost unlimited; and better still, it can be played perfectly in tune—which the old flute could not. Improvements scarcely less important have been made in the horn, the clarinet, and the oboe. The trombone has suffered comparatively little change; and the bassoon retains, substantially unaltered, the form it bore when Handel wrote for it; but these alone, among wind instruments, have escaped a sweeping metamorphosis since the beginning of the last century.

Remembering this, we can scarcely feel surprised that the orchestration of the "occasional overture" should bear but little outward resemblance to that of the overture to "Tannhäuser." Yet the bond of union subsisting even between such extremes as these is much closer than might at first sight be supposed. The principle is in all cases the same. The best composers of every epoch have aimed at the same general char-

acteristics; and experience has proved that where these are present no combinations can be condemned as wholly ineffective, whether they bear the stamp of true genius or not.

The most prominent characteristics of good instrumentation are: (1) Solidity of structure; (2) breadth of tone; (3) boldness of contrast; (4) variety of coloring. We will endeavor to illustrate each of these necessary qualities by examples selected from the scores of a few great masters of different periods.

1. Solidity of structure can only be obtained by careful management of the stringed instruments. If the part allotted to these be not complete in itself, it can never be completed by wind instruments. Whether written in five, four, three, or two parts, or even in unison, it must sound well, alone. This principle was thoroughly understood even as early as the close of the sixteenth century, when the originators of the newly invented instrumental schools bestowed as much care upon their viols as their immediate predecessors had devoted to their vocal parts. For instance, "Le Balet comique de la Royne"—a piece written in 1581—is so arranged as to be equally complete whether played by viols alone or with each separate part aided by a ripieno wind instrument.

Handel constructed many of his finest overtures upon this principle; and, in common with Johann Sebastian Bach and other great composers of the eighteenth century, he delighted in its fine, bold, masculine effect. Later writers improved upon it by embellishing the stringed foundation with independent passages for wind instruments. Thus Mozart, in his overture to "Figaro," first gives the well-known subject

to the violins and basses in unison, and then repeats it, note for note, with the addition of a sustained passage for the flute and oboe, which brings it out in quite a new and unexpected light.

Sometimes we find this order reversed, the subject being given to the wind, and the accompaniment to the stringed instruments; as in the opening movement of Weber's overture to "Der Freischütz."

In either case, the successful effect of the passage depends entirely upon the completeness of the stringed skeleton. A weak point in this—whether the principal subject be assigned to it or not—renders it wholly unfit to support the harmony of the wind instruments, depriving the general structure of the firmness which it is one of the chief objects of the great master to secure.

2. Breadth of tone is dependent upon several conditions, not the least important of which is the necessity for writing for every instrument with a due regard to its individual peculiarities. This premised, there is little fear of thinness when the stringed parts are well arranged and strengthened, where necessary, by wind instruments, which may either be played in unison with them—as in the overture to "Jephtha," where Handel has reinforced the violins by oboes, and the basses by bassoons—or so disposed as to enrich the harmony in any other way best suited to the style of particular passages—as in that to "Acis and Galatea," in which the oboes are used for filling in the harmonies indicated by the figured bass, while a brilliant two-part counterpoint, so perfect in itself that it scarcely seems to need anything to add to its completeness, is played by the violins and basses, the latter being strengthened by the bassoons.

Among more modern writers, Beethoven stands pre-eminent for richness of tone, which he never fails to attain, either by careful distribution of his harmony among the instruments he employs, or in some other way suggested by his ever-ready invention. In a passage from the adagio of the Fourth symphony (in B♭) this richness is secured by the perfect proportion established between the tone of the stringed and wind instruments, which afford each other the exact amount of support needed for the completion of the general effect.

Other composers have attained similar results in innumerable different ways; but it will generally be found that the most satisfactory passages are those which exhibit a judicious disposition of the harmony, a just balance between the stringed and wind instruments, and a perfect adaptation of the parts to the instruments for which they are written. These points are worthy of particular attention.

3. Boldness of contrast is produced by so grouping together the various instruments employed as to take the greatest possible advantage of their difference of timbre. The instrumental band, as now constituted, naturally divides itself into certain sections, as distinct from each other as the manuals of an organ. The first and most important of these is the stringed band, which is the foundation of the whole. The second, sometimes called the "wood-wind," is led by the flutes, and completed by reed instruments, such as the oboe, the clarinet, and the bassoon. The third, the brass band, is subdivided into two distinct families, one formed by the horns and trumpets, to which latter the drums supply the natural bass, the other comprising

the three trombones, and, in the noisy orchestras of the present day, the tenor tuba or euphonium. The principle of subdivision is, indeed, frequently extended to all the great sections of the orchestra. For instance, the flutes and oboes are constantly formed into a little independent band, and contrasted with the clarinets and bassoons. Handel even divides the stringed band, and produces fine effects of contrast by so doing. In a large proportion of his best and most celebrated songs, the voice is accompanied by a thorough-bass alone: that is to say, by a part for the violoncello and double bass, with figures placed below the notes to indicate the chords intended to be filled in on the organ or harpsichord. The symphonies are played by the violins, in unison, with a similar thorough-bass accompaniment; and the entrance of these instruments between the vocal passages is marked by a contrast as striking as it is agreeable.

In some of his songs Handel has enlarged upon this method; as in "Lascia ch'io pianga," from "Rinaldo," the first part of which is accompanied by the full stringed band, and the second by a thorough-bass only, the violins and viola reappearing at the da capo. It is impossible to believe that the great composers of the last century, with Handel and Bach at their head, adopted this style of accompaniment without having duly considered its effect; and any attempt to heighten that effect by additional accompaniments shows as little reverence for art as would be evinced by a desire to cover the Sistine Madonna with "additional glazings." The songs are perfect as they stand: and the contrast they display is as marked in its degree as that in the celebrated passage from Beethoven's Fifth symphony

(in C minor), in which the stringed instruments and wood-wind are made to answer each other in alternate chords.

This last expedient is by no means uncommon in modern music, and has been most successfully used by Mendelssohn in his overture to "A Midsummer Night's Dream," where a few sustained notes on the wind instruments are contrasted with the rapid passage for four violins with excellent effect. The trio for brass instruments in the minuet of Sir William Sterndale Bennett's symphony in G minor is another striking instance of fine and quite unexpected contrast; and cases abound in which composers of instrumental music have treated the several sections of the orchestra very much in the way in which vocal writers treat alternate choirs, producing thereby innumerable beautiful effects of bold relief and strongly contrasted tone.

4. Variety of coloring results from the judicious blending together of the several elements which we have just considered as opposed to each other in more or less violent contrast. In the instrumentation of the great masters this quality is always conspicuous: in that of inferior writers never. Its presence may, indeed, be regarded as one of the surest possible indications of true genius, which never fails to attain it in the face of any amount of difficulty.

In the eighteenth century Handel wrought marvels with the slender means at his command: with trumpets and oboes in the opening movements of the "Occasional Overture" and the "Dettingen Te Deum"; with oboes and bassoons in "The Lord is a man of war"; with flutes and horns in "Surge procelle, ancora"; with a somewhat larger number of wind instruments in "Wise

men flattering"; but often, as in "Angels ever bright and fair," with the stringed band alone, and always with infinite variety of tone and expression. Bach anticipated, in like manner, many of our most highly prized modern effects, as in the delicious combination of horn and bassoons in the "Quoniam tu solus" of his mass in B minor.

As new wind instruments were invented, or old ones improved, the power of producing variety of coloring became, of course, immeasurably increased. Haydn took signal advantage of this circumstance in "The Creation" and "The Seasons"; but Mozart's delightful system of instrumentation surpasses in beauty that of all his contemporaries. His alternations of light and shade are endless. Every new phrase introduces us to a new effect; and every instrument in his orchestra is constantly turned to account, always with due regard to its character and capabilities, and always with a happy result.

It may be necessary to say that Beethoven was a greater master of this peculiar phase of instrumentation than Mozart; and in this, as in everything else, he certainly repeated his own ideas less frequently than any writer that ever lived. The wealth of invention exhibited in the orchestral effects of this composer—even in those of his works which were produced after his unhappy deafness had increased to such an extent that he could not possibly have heard any one of them—is boundless. In every composition we find a hundred combinations, all perfectly distinct from one another, yet all tending, in spite of their infinite variety, to the same harmonious result, and all wrought out, with indefatigable care, in places which many less

conscientious authors would have passed over as of comparatively little importance—such, for instance, as the two or three concluding bars of the slow movement of the "Pastoral" symphony (No. 6, in F).

This minute attention to detail is observable throughout the entire series of Beethoven's orchestral works, and we may well believe that it stimulated in no small degree the emulation of his contemporaries, for the age in which he lived produced more than one instrumentalist of the highest order. Schubert, we need hardly say, is a host in himself. Weber's mastery over the orchestra is perfect, and adds not a little to the charm of his delightful compositions. The dreamy opening of his overture to "Oberon," with its three sweet notes for the horn, followed by one of the most fairylike passages for the flutes and clarinets that ever was imagined; the lovely melody allotted to the horns in the overture to "Der Freischütz," and the eldritch sounds which succeed it; above all, the mysterious largo, for four violins, con sordini, which so strangely interrupts the allegro of the overture to "Euryanthe," and the gloomy tremoli for the viola which add so much to its weird effect—these, and a hundred similar passages, evince a purity of taste and an originality of conception which have rarely, if ever, been exceeded by the greatest masters. Mendelssohn exhibits scarcely less richness of invention in his symphonies, his concertos, and especially in his charming concert overtures to "Die schöne Melusine" and "A Midsummer Night's Dream." In freshness of coloring, and inexhaustible fertility of resource, Spohr's great symphony "Die Weihe der Töne" once served as a model. Berlioz, whose "Traité d'instrumentation" no

young composer should neglect to read, studied the subject deeply and with extraordinary success. And undoubtedly the strongest of Richard Wagner's strong points is that intimate acquaintance with the orchestra in all its phases which, guided by his keen perception of effect, enabled him to weave its elements into any new combinations best suited to his purpose. He it was who first conceived, among other daring and beautiful innovations, the idea of using the high harmonic sounds of the violin in unison with flutes and other wind instruments. The prelude to "Lohengrin" depends almost entirely for its enchanting effect upon four solo violins and three flutes, used in a way before unknown, and crowned, it is needless to say, with triumphant success.

It is indeed certain that during the years that have elapsed since the death of Beethoven more real progress has been made in instrumentation than in almost any other branch of art. Innumerable new effects have been attempted, with more or less success; and though much evil has been wrought of late years by a growing tendency to overweight the brass band with coarse-toned instruments fit only for military use, the best composers have uniformly resisted the movement. Preferring sonority to noise, they have left the latter to those who aim at nothing higher than the short-lived approval of a vulgar audience. In truth, less mischief has been done by composers even of the lowest class of dance music, than by injudicious conductors, who, never satisfied when the trombones are silent, have overloaded the scores of the great masters with additions of the most unwarrantable character. So far has this abuse extended, that the student can

never be sure that he is listening to the effect really intended by the composer. Let him, then, endeavor to gain experience, by studying the scores of all the best works to which he can obtain access; and when he shall have attained the power, not only of recognizing in performance the effects he has already read upon paper, but even of hearing them distinctly in imagination while he is reading them, he will have gained the first step in that road which all must tread who would write well for the orchestra, and delight their hearers with really good instrumentation.

It is in this way alone that the art can be satisfactorily studied. It cannot be taught in words. Much valuable information may indeed be gleaned from the well-known treatises of Berlioz, Prout, and Gevaërt, which no earnest student should neglect to read. But even the most careful writers find it less easy to lay down definite rules for their readers' guidance than to convey instruction by constant reference to examples selected from the works of the great masters. It is for this reason that we have thought it better to take a general view of our subject than to enter minutely into its details. This course has at least enabled us to give due prominence to the fundamental principles upon which the science of orchestration is based; whereas the opposite one would have led to the consideration of a series of isolated facts of far less value to the general reader.

CHAPTER XVI

RHYTHMS

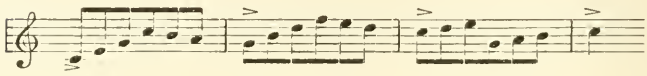
Structure and Rhythms—Grammatical and Oratorical Accents —The Bar-line—Various Time-Signatures—Contrasts in Rhythm—Liking for Rhythm Inborn.

BEFORE we can understand the form of an extended musical work, it is necessary to study the structure, the rhythms, and the varying emotions of each movement or section of the work; and to get a clear understanding of a movement, the themes and phrases must be studied in detail.

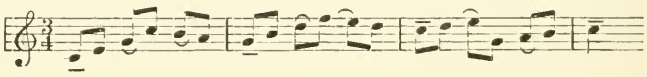
Rhythm in music, as in poetry, consists of regular, recurring accents. In poetry the rhythm is indicated by the position of the accented words and syllables. In music the rhythm is marked, first by the position of the bar-lines, and secondly by the number and length of the notes between the bar-lines. The rhythm, or regular accentuation, which results from the position of the bar-line, is called the grammatical accent. The occasional accent irregularly placed on other notes which would otherwise be unaccented, is called the oratorical accent. Rhythm is the meter of music. The reader is referred to Ernst Pauer's "Musical Forms" for definitions of these technical terms of musical meter: trochee, iambic, spondee, bacchic, cretic, antibacchic, molossus, tribrach.

Composers not only place bar-lines throughout a

composition, but they also add a time-signature in the first bar to indicate how many beats each bar is to have. The necessity for a time-signature will at once be apparent if we try to play this passage without a time-signature:



The rhythm is not clearly indicated by the bar alone. If the time-signature is $\frac{3}{4}$ there will be three accents in the bar, thus:



The first accent will be strong, and the second and third weaker.

If the time-signature is $\frac{6}{8}$ there will be two almost equal accents in the bar, thus:

The reason why there are only two accents in these bars and not six is that $\frac{8}{6}$ is a compound rhythm, while $\frac{3}{4}$ is a simple rhythm.

Compound time is a term applied to a bar that can be subdivided into two or more smaller bars.

The time-signatures most commonly used are:

(*a*) common time, which is marked $\frac{4}{4}$ or **C**
(*b*) $\frac{3}{4}$; (*c*) $\frac{2}{4}$; (*d*) $\frac{6}{8}$.

Of these it is unnecessary to give examples. The less used time-signatures are:

$\mathbb{C}$ or $\frac{2}{2}$ (alla breve)—Schubert, Symphony in C, first movement.
$\frac{3}{2}$ - - Wagner, "Die Meistersinger," Intro., Act iii.
$\frac{6}{4}$ - - Schumann, "Paradise and the Peri," No. 15.
$\frac{9}{4}$ - - Wagner, "Parsifal," Prelude.
$\frac{2}{3}$ - - Berlioz, "Faust," Chanson de Brander.
$\frac{3}{8}$ - - Rossini, "Guillaume Tell," No. 1.
$\frac{9}{8}$ - - Beethoven, Sonata Op. 109.
$\frac{9}{16}$ - - " " Op. 111.
$\frac{12}{16}$ - - Bach's Prelude No. 13, Vol. I, W. T. C.

In Bach's works are to be found, in addition to all the time-signatures mentioned above, the following unusual time-signatures:

2 & 2 - Sonata for violin and clavier.
$\frac{12}{8}$ - Prelude V, vol. ii of the 48 Preludes and Fugues.
$\frac{6}{16}$ - Fugue in D.
$\frac{24}{16}$ - Toccata and Fugue in G minor.
$\frac{16}{32}$ - Clavier Fantasia.
$\mathbb{C}$ & $\mathfrak{D}$ (double common)—Partita VI.

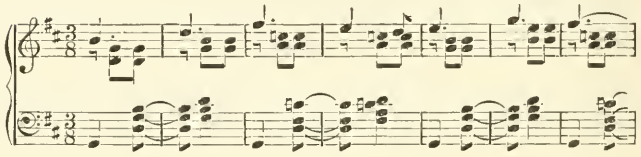
Composers occasionally employ two or more rhythms at once. Examples may be found in the following works:

$\frac{2}{4}$ and $\frac{6}{8}$ together—Berlioz, "Faust," Chorus of Soldiers and Students.
$\frac{6}{4}$ and $\frac{6}{8}$ together—Berlioz, "L'enfance du Christ."
$\frac{9}{8}$ and $\frac{3}{4}$ " " " "
$\frac{24}{16}$ and $\frac{3}{4}$ Bach, Prelude XV.
$\frac{12}{8}$ and $\frac{3}{4}$ together " Cantata 102.
$\frac{3}{4}$ and $\frac{9}{8}$ " " " 24.

In Mozart's "Don Giovanni" is to be found an example of a German dance ($\frac{3}{8}$), a gavotte ($\frac{2}{4}$), and a minuet ($\frac{3}{4}$), to be performed simultaneously.

In E. A. MacDowell's "Hexentanz," Op. 17, No. 2, there is a pleasing and ingenious combination of $\frac{3}{8}$ and $\frac{3}{4}$. It is true the $\frac{3}{4}$ time is not indicated in the signature, but the effect of the left-hand part of the brilliant piano solo, which is here given in a simplified form, is that of a $\frac{3}{4}$ rhythm:

MacDowell



The student is referred to Spohr's symphony "Die Weihe der Töne" for some peculiar time-signatures.

In all these examples the rhythms are simple or compound forms of 2, 3, or 4. Rhythms of 2 or 4 might be represented to the eye by angles, and rhythms of 3 by curves.

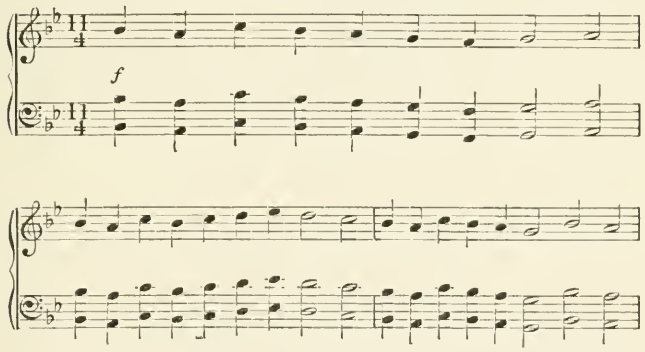
In rare instances the composer finds it necessary to avail himself of rhythms that cannot be compounded of 2, 3, or 4:

$\frac{5}{4}$	-	Chopin, Sonata in C minor.
$\frac{7}{4}$	-	Elgar, "Caractacus," Lament.
$\frac{5}{8}$	-	" "The Dream of Gerontius."
$\frac{7}{8}$	-	Lucas, Pastorale for organ, Op. 31, No. 2.

The $\frac{5}{4}$ is the most frequently employed of this class of rhythms. The insinuating movement in Tchaikovsky's "Symphonie pathétique" is a popular example of $\frac{5}{4}$.

Alice C. Fletcher, whose "Study of Omaha Indian Music" has been published by the Peabody Museum of American Archæology and Ethnology of Harvard University, gives examples of native songs in $\frac{5}{4}$ rhythms; and A. M. Chinnaswami Mudaliyar's "Oriental Music," published in Madras, contains examples of native East Indian melodies in $\frac{5}{4}$ rhythms, showing that this rhythm is sometimes the product of musical instinct. But it is probable that art and a search for novelty, rather than instinct, were responsible for Rimsky-Korsakov's $\frac{11}{4}$ rhythms.

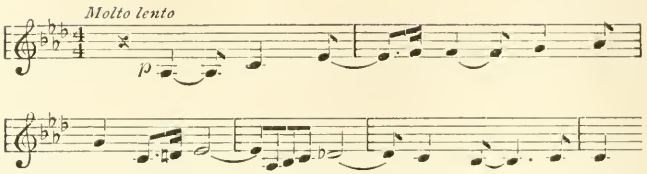
RIMSKY-KORSAKOV



Sir Edward Elgar informs us that as a boy he wrote pieces in $\frac{11}{4}$ and $\frac{13}{4}$ rhythms.

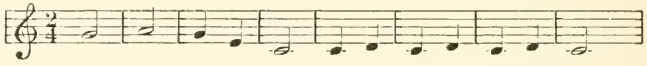
Composers sometimes weaken the rhythm, or eliminate it altogether, when they wish to avoid all taint of human passion in their religious works. Many masses of Palestrina are notable examples of the subordination of rhythm. In Wagner's religious drama, "Parsifal," the sacramental theme is so constructed that it is impossible for the listener to feel any rhythmic pulse in it.

WAGNER



Rhythm is the life, the heart-beat of music. Through it the various temperaments of composers of different nationalities are easily discernible. Compare the rhythms of Rossini's "Guillaume Tell" with those of Wagner's "Die Meistersinger." The vivacity of the Italian and the massiveness of the German are expressed by rhythms alone. The folk-songs of romantic Spain are almost always in rhythms of 3 or 6; while the prosaic Chinaman employs the squarer 2 and 4 rhythms.

The capacious and sensitive brain of a great composer could not be limited in its expression to the simple rhythms of primitive man. The following tune, which is a complete musical expression of the savages of Brazil, is transcribed from the singing of an engineer who had spent many months on the banks of the Amazon:



What an abyss separates the dull brains of the barbarians who delight in bellowing this phrase for hours from the intellect that conceived the rhythms of Schumann's "Manfred" overture!

Darwin says it is impossible to give a reason for this liking for melody and rhythm. It is inborn, like

our sense of taste and smell. Our earliest impressions are through the senses, and a rhythmical sound pleases the infant that an irregular noise would frighten. As Darwin declares: "The sensations and ideas thus excited in us by music, or expressed by the cadences of oratory, appear from their vagueness, yet depth, like mental reversions to the emotions and thoughts of a long-past age."

CHAPTER XVII

PROGRAMME MUSIC

Imitation of the Sounds of Nature—Some Noteworthy Examples—The "Pastoral" Symphony—Descriptive Music in Mendelssohn's Overtures—Liszt and the Symphonic Poem—Culmination of this Form in Richard Strauss.

PROGRAMME music is an epithet originally intended to apply to that interesting class of music which, while unaccompanied by words, seeks to portray, or at least suggest to the mind, a certain definite series of objects or events. But the term is also applied, with vagueness of meaning, to all dramatic, characteristic, or imitative music whatever. It must always remain an open question how far music is able of itself to influence the mind's eye, for the simple reason that some imaginations are vastly more susceptible than others, and can therefore find vivid pictures where others see and hear nothing. Also, in programme music of all kinds, the imagination is always turned in the required direction by the title of the piece, if by nothing else.

It is held by some that music should never seek to convey anything beyond the "concourse of sweet sounds," or at least should only portray states of feeling. But what is the opinion of the bulk of audiences, who, though artistically ignorant, are not of necessity vulgar-minded? To the uninitiated a symphony is a

chaos of sound, relieved by scanty bits of "tune"; great then is their delight when they can find a reason and a meaning in what is to them like a poem in a foreign tongue. A cuckoo or a thunderstorm assists the mind which is endeavoring to conjure up the required images. And two other facts should be borne in mind: one is that there is a growing tendency among critics and educated musicians to invent imaginary "programmes" where composers have mentioned none—as in the case of Weber's Concertstück and Schubert's C major symphony, for instance—and another, that music, when accompanied by words, can never be too descriptive or dramatic, as in Wagner's music-dramas and the "Faust" of Berlioz.

May it not at least be conceded that though it is a degradation of art to employ music in imitating the sounds of nature—illustrious examples to the contrary notwithstanding—it is a legitimate function of music to assist the mind, by every means in its power, to conjure up thoughts of a poetic and idealistic kind? If this be granted, programme music becomes a legitimate branch of art, in fact the noblest, the *nature of the programme* being the vital point.

The *Leitmotiv* is an ingenious device to overcome the objection that music cannot paint actualities. If a striking phrase once accompany a character or an event in an opera, such a phrase will surely be ever afterward identified with what it first accompanied. The "Zamiel motive" in "Der Freischütz" is a striking and early example of this association of phrase with character.

It is quite possible for a musical piece to follow the general course of a poem or story, and, if only by

evoking similar states of mind to those induced by considering the story, to form a fitting musical commentary on it. Such programme pieces are Sir William Sterndale Bennett's "Paradise and the Peri" overture, Von Bülow's "Sängers Fluch," and Liszt's "Mazeppa."

Among descriptive vocal pieces of the seventeenth century should be noticed the frost scene in Purcell's "King Arthur," in which the odd effect of shivering and teeth-chattering is rendered by the chorus. Such imitations are said to have created much delight among the audience.

A number of Haydn's symphonies are distinguished by names, but none are sufficiently descriptive to be included here. Characteristic music there is in plenty in "The Seasons" and "The Creation," but the only pieces of actual programme music—and those not striking specimens—are the earthquake movement, "Il Terremoto," in the "Seven Words," and the representation of chaos in "The Creation," by an exceedingly unchaotic fugue. Mozart adds nothing for us here, though it should be remembered how greatly he improved dramatic music.

Beethoven was his own authority for the fact that when composing he had always a picture in his mind, to which he worked. But in two instances only has he described at all in detail what the picture was. These two works, the "Pastoral" and the "Battle" symphonies, or of vastly different caliber. The former, without in the slightest degree departing from orthodox form, is a splendid precedent for programme music. In this, as in most works of the higher kind of programme music, the composer seeks less to imitate the actual sounds of nature than to evoke the same feelings as

are caused by the contemplation of a fair landscape, etc. It may be worth mentioning that the "Pastoral" symphony has actually been "illustrated" by scenes, ballet, and pantomime action in theaters.

Another interesting fact concerning the "Pastoral" symphony is the identity of its programme with that of the "Portrait musical de la nature" of Knecht. The similarity, however, does not extend to the music, in which there is not a trace of resemblance. Some description of the little-known "Battle" symphony may not be out of place here. It is in two parts; the first begins with "English drums and trumpets," followed by "Rule Britannia," then come "French drums and trumpets," followed by "Malbrough." More trumpets to give the signal for the assault on either side, and the battle is represented by an allegro movement of an impetuous character. Cannon of course are imitated—storming march—presto—and the tumult increases. Then "Malbrough" is played slowly and in a minor key, clearly, if somewhat inadequately, depicting the defeat of the French. This ends the first part. The second part is entitled "Victory" symphony and consists of an allegro con brio followed by "God Save the King" —a melody which Beethoven greatly admired. The allegro is resumed, and then the anthem is worked up in a spirited fugato to conclude.

As for the other works of Beethoven that are considered as programme—or at least characteristic—music, it is sufficient here to remark that the "Eroica" symphony only strives to produce a general impression of grandeur and heroism, and the "Pathetic" and "Farewell" sonatas do but portray states of feeling, ideas which music is peculiarly fitted to convey.

Coming now to modern times, we find a perfect mania for giving names to pieces—showing the bias of popular taste. Every concert overture *must* have a title, whether it be programme music or not. Every "drawing-room" piece, every waltz or galop, must have its distinctive name, till we cease to look for much descriptiveness in any music. It cannot be said that all Mendelssohn's overtures are programme music. The "Midsummer Night's Dream," with its tripping elves and braying donkey, certainly is, but the "Meeresstille," "Hebrides," and "Melusine" are only pieces which assume a definite color or character, the same as his "Italian" and "Scotch" symphonies. To this perfectly legitimate extent many modern pieces go; and some term like "tinted music" should be invented for this large class of compositions, which includes the greater part of Schumann's pianoforte works, for instance. The "Carneval" is decidedly programme music, so are most of the "Kinderscenen" and "Waldscenen"; while others, despite their sometimes extravagant titles, are purely abstract music. It is well known that Schumann often invented the titles after the pieces were written. Such pieces as the fantasia in C and the longer "Noveletten" from their poetic cast and free form give a decided impression of being intended for descriptive music.

Spohr's symphony "Die Weihe der Töne" bears some relation to the "Pastoral" symphony in its first movement; the imitations of nature's sounds are perhaps somewhat too realistic for a true work of art, but have certainly conduced to its popularity.

David's wonderful ode-symphonie "Le désert" must not be omitted, though it is almost a cantata, like the

"Faust" of Berlioz. Modern dramatic music, in which descriptiveness is carried to an extent that the old masters never dreamed of, forms a class to itself. This is not the place to do more than recall the wonderful achievements of Weber and Wagner.

Berlioz was one of the greatest champions of programme music; he wrote nothing that was not directly or indirectly connected with poetical words or ideas; but his love of the weird and terrible has had a lamentable effect in repelling public admiration for such works as the "Francs Juges" and "King Lear" overtures. Music which seeks to inspire awe and terror rather than delight can never be popular. This remark applies also to much of Liszt's music. The novelty in construction of the "Symphonische Dichtungen" would be freely forgiven were simple beauty the result. But such subjects as "Prometheus" and "The Battle of the Huns," when illustrated in a sternly realistic manner, are too repulsive, the latter of these compositions having indeed called forth the severe remark from an eminent critic that "these composers [Liszt, etc.] prowl about Golgotha for bones, and, when found, they rattle them together and call the noise music." But no one can be insensible to the charms of the preludes "Tasso," "Dante," and "Faust."

Bennett's charming "Paradise and the Peri" overture is a good specimen of a work whose intrinsic beauty pulls it through. An unmusical story, illustrated too literally by the music—yet the result is delightful. Raff, who ought to have known public taste as well as any man, named seven out of his nine symphonies, but they are descriptive in a very unequal degree. The "Lenore" follows the course of Bürger's

well-known ballad, and the "Im Walde" depicts four scenes of forest life. Others bear the titles of "The Alps," "Spring," "Summer," etc., but are character music only. Raff, unlike Liszt, remains faithful to classical form in his symphonies, though this brings him into difficulties in the finale of the "Forest" symphony, where the shades of evening have to fall and the "Wild Hunt" to pass, twice over. The same difficulty is felt in Bennett's overture.

That the taste for "music that means something" is an increasing, and therefore a sound one, no one can doubt who looks on the enormous mass of modern music which comes under that head. Letting alone the music which is only intended for the uneducated, the extravagant programme quadrilles of Jullien, and the clever, if vulgar, imitative choruses of Offenbach and his followers, it is certain that every piece of music now derives additional interest from the mere fact of having a distinctive title. Two excellent specimens of the grotesque without vulgarity in modern programme music are Gounod's "Funeral March of a Marionette" and Saint-Saëns's "Danse macabre." In neither of these is the mark overstepped. More dignified and poetic are the other "Poèmes symphoniques" of the latter composer, the "Rouet d'Omphale" being a perfect gem in its way. We may include Goldmark's "Ländliche Hochzeit" symphony in our list, and if the characteristic studies of Moscheles, Liszt, Henselt, and others are omitted, it is because they belong rather to the other large class of character pieces.

Coming down to the present day, we find the foremost composer of programme music in Richard Strauss, who, having adopted the free outlines of the

symphonic poem devised by Liszt as his preferred medium for the expression of his musical ideas when restricted to the use of orchestra alone, first attracted attention to himself as the composer of "Also sprach Zarathustra." A long succession of similar works, culminating in the "Sinfonia Domestica," evoked this comment from James Huneker: "He has in his symphonic forms pushed to the verge of the sublime—or the ridiculous—or both—the poetic programme."

APPRECIATION OF MUSIC

I. HOW TO ENJOY MUSIC

By Annie W. Patterson

Nature and Effect of Music—Audiences of To-day—Sense of Rhythm—Appreciation of Tune—Contrast in Melody—Taste for Classical Music—Concert Reform—Music in the Home—Influence of Surroundings—Beneficial Powers of Music.

MUSIC has been defined as the language of the emotions—a description of its properties which fits the art better than to term it the language of sound, and thus class it, as did Dr. Samuel Johnson, among "the least disagreeable of noises."

That sensations produced by the hearing and performing of music should be pleasurable ones, few will deny. The enjoyment which music-making gives varies, however, with the kind of music rendered, as with the temperament, education, and natural gifts of individuals. Thus, while simpler forms, such as the lullaby or military march, respectively soothe or exhilarate, those who experience a sense of exultation on listening to a good interpretation of a Beethoven symphony are often, if students or thinkers, irritated past endurance by the barrel-organ's version of the latest "popular song." The reputation of a nation's musicianship depends, indeed, upon its faculties for gratification either in rendering or listening to music; so in this chapter the point to be emphasized is the enjoy-

ment of music, a topic demanding consideration from a hearer's as well as a performer's point of view.

If audiences wore their hearts upon their sleeves, it would be interesting to collect statistics recording the genuine feelings produced by concerts and all descriptions of musical performances. Upon reading accounts of grand opera during the season at the Metropolitan Opera House, one is disposed to believe that the music is a mere background for the assemblage of wealth and title, the display of diamonds, and, quite incidentally, the appearance of a famous "star." It is well known also that patrons of musical comedy do not often frequent a chamber-music recital, nor do those who revel in a ballad concert care to sit out an orchestral performance. The absurdity comes in when highly cultured modern musicians, who have been gradually acclimatized to the rarefied atmosphere of Brahms, Tchaikovsky, and Richard Strauss, look down with scornful pity upon uncultured music-lovers who can only enjoy something that has "a step and a tune" in it. Yet here, perhaps, the "advanced" musician makes a mistake, not only in judgment but with regard to the legitimate progress of his profession.

It is unfair to say of a reader that he is devoid of poetic feeling if, although he may delight in the easy meters and simple imagery of Longfellow, he finds Browning somewhat beyond his depth. Evidently, to bring the enjoyment of good music within the reach of all, there needs broader intelligence on the part of audiences, and greater tolerance and perspicuity on the part of those who musically cater for them. The supreme influence of the press is not to be forgotten. Instead of relegating musical articles and departments

to the shortest possible space as of no importance, editors may do well to think of that immense and ever-growing student and amateur class who, if they sometimes swell the profits of the music-pirate, are now clamoring for gramophones and piano-players—anything from a tin whistle to a pianola—that will give them music in the home.

The first step toward musical appreciation appears to be the sense of rhythm or recurrence of beats. Even though the love of percussion instruments is strong in the savage, the fondness of the child for clicking toys, or his ability to march in time to the music of a military band, should not be despised. In the Gaelic peoples we observe an innate sense of rhythm, whence the multitude and beauty of many highly characteristic national dances—the reel, jig, and hornpipe. The eminently vital popularity of the brass band in many countries shows that the people have that first essential of a musical ear, the sense of recurrent beats. One ought to be rather lenient with the noisy man who, at a concert, keeps time with his feet to a popular tune. His enjoyment of the periodic beat is as keen as is the delight of the baby who smiles and crows when a ticking watch is placed to his ear.

Next to rhythm, and often coexistent with it, comes the appreciation of tune. Take any people's tune or folk-song and submit it to analysis. Suppose, for example, that "Home, Sweet Home," "The Bluebells of Scotland," and "The Harp that once through Tara's Halls" be the selections chosen. In each of these there will be found a first or principal phrase of a singable character. This is usually repeated, with or without a varied cadence, as in the first two named. In the

middle portion there is a rising effect, produced either by pitch or scale ascent. Finally, in the concluding phrase, there is a strong reminiscence, if not a direct repetition, of the original or chief theme. Herein we have sonata form in embryo, the groundwork of the classical composer's art. Indeed, the wondrous symmetry of national song—theme, middle phrase, and repetition—offers a fascinating study; and as an impetus to such research it may be mentioned that Sir Charles H. H. Parry considers the ancient Gaelic tune "Emer's Farewell to Cuchullain" one of the most perfect melodic fragments in existence. Hence the fondness for beautiful melody, or even for its music-hall travesty with the much-beloved "step and tune," is by no means to be ignored by those who would make music for the people. In all forms of music melody plays its essential part.

Were one further to analyze the nature of melody which gives the most universal pleasure, it might appear to be based upon a well-balanced contrast of ascending and descending diatonic scale intervals. That going up and going down the gamut produces, respectively, sensations of exertion and repose, is generally allowed. The mingling of these suggestions of activity and rest will be found, in miniature, in well-nigh all favorite songs; while the working up to a climax—whether of pitch or intensity, or both—and the fall to a final cadence, constitute those features which give life to more extended compositions. One is reminded here of the way in which rural Scottish precentors sometimes recollect the swing of the well-known tune "Dundee," which in many old Presbyterian congregations is popularly known as "French." The memory-

lines, which exactly fit the common measure of the melody, go as follows:

The first tune we do sing is "French";
The second measure low;
The third extendeth very high;
The fourth downward doth go,

the word "tune" here referring to each phrase, or section, of the melody.

We are now brought face to face with an interesting problem. If the performance of music should make for universal enjoyment, how can many musical programmes, which confessedly appeal but to a few, be made generally acceptable? The question is, how can music become as widely acceptable as is, say, fiction? It is scarcely fair for "advanced" musicians to assume the attitude of high priests and forbid all but the elect minority to enter the inner sanctuary of exalted appreciation. The taste for classical music is an acquired one, just as fondness for certain viands is brought about by circumstances and conditions of life. Tastes, it is allowed, will always differ; but some compromise can always be arrived at which, while affording luxuries and titbits to palates desiring them, may yet cater on a liberal scale to those who have a healthy appetite for all foods that are wholesome and nutritive. If the masses do not yet fully enter into the delights of oratorio, grand opera, or orchestral symphony, not by forcing such heavy aliment down their throats, but by gradually increasing mild doses, may the rarer musical tonic or sedative at length have due effect.

The first step toward popular musical reformation must be wholesale readjustment of concert pro-

grammes. These are frequently far too long—the menu of the ballad concert insufferably so. Who is not wearied to boredom by sitting out twenty or more numbers, however admirable may be individual singers? Among the artists some must invariably suffer through such undue prolongation; for, with sopranos, tenors, solo violinists, and pianists clamoring for the "best" places, the unhappy mezzo sopranos and barytones must begin and end the performance, generally to the accompaniment of the clatter of late arrivals or early departures. Regarding individual selection, artists will do well, if they desire to make a really pleasurable impression, to keep their ambition within bounds. Bracketed numbers and song-cycles are less acceptable to the general public than their exponents are willing to believe. Often the ovation which a performer meets with on the conclusion of his item embodies an expression of relief that so lengthy a number is over.

Nor, were love for the art itself genuine, should there be so wide a distinction between artists of different kinds. This might be death to the "star system"; but it would be life to the musical instincts of the people. Young beginners with fresh voices would not then worry themselves into premature middle age before they were acknowledged virtuosi; nor would an opening concerted number, full of the matured beauty of a great master, be listened to with less rapt attention than the better-placed warbling of a favorite tenor. Were the length of an ordinary concert reduced to an hour, and less stereotyped methods observed in the order in which singers appear, it is possible that the public would eventually go to such entertainments to enjoy the music itself, not merely to

have it to say that they have heard a certain celebrity. Again, two or more symphonies at the same orchestral performance seem a plethora of good things. Even the most appreciative palate becomes satiated after a certain point. It is questionable if the second portion of "Messiah" and "Elijah" programmes, or the last acts of Wagner operas, are as much enjoyed by the majority of listeners as if these portions could be heard at the beginning of performances, when the mind is fresh to imbibe their intrinsic beauties.

The logical conclusion that an unprejudiced observer must come to is that, living in an age when time must be economized, everything should fit its particular period and place, and at all events not err by either oppressiveness or aggressiveness. Even mechanism has come to the aid of the student who practises; and what with the digitorium, physical drill, practice-claviers—to say nothing of self-players—every possible device is offered to the learner to diminish his own drudgery in preparation work, and save the irritation caused to hearers by incessant reiteration of scales and technical exercises.

The charm of music in one's home circle depends, no doubt, on the members composing that circle—on their individual temperaments and abilities. Apart from gifts of solo playing and singing, there are, for moderate performers, the very real pleasures of duet and concerted work of all kinds. The pianoforte duo might well be cultivated more than it is. It is a practical assistance in sight-reading, capital exercise for those who are weak timists, and a source of delightful companionship in performance which only needs trying to be appreciated. The formation of glee-parties, meeting

from house to house on fixed evenings every week, is to be recommended as a practical method of tasting the sweets of part-singing—an art long practised in student circles by the German people.

Surroundings have unquestionably much to do with the enjoyment of music. Possibly the keenest delight of all is felt by one who, brought up in unmusical environments, gradually makes for himself an atmosphere of sweet sounds, eventually drawing others into the same enchantment. The greatest musical enthusiasts appear to come from that class which, having encountered many obstacles in winning a position in the world of music, can enter into, and feel for, the difficulties in the way of struggling professional musicians. It remains a curious fact that, with a few noted exceptions, the children of musicians seldom inherit the gifts of their progenitors.

Higher still than the production of feelings, soothing, reflective, or encouraging, is the tendency which music has, when rightly administered, to act as a curative agent. The Biblical incident of David driving the evil spirit from Saul with his harp-playing will occur to many. Celtic legendary lore is particularly rich in accounts of musical performances, mysterious or otherwise, which are said to have softened angry passions, produced ecstatic exhilaration, or lulled persons to sleep. Music has often been the solace of the dying; and attempts have been made to apply the "sound-cure" to the sick, with encouraging results. Again, physicians acknowledge that in cases of mental disease music has been found to produce beneficial effects, the only question being the method and nature of its application as a palliative. For lassitude or depression,

melodious sounds are often a sovereign balm, and one is forcibly reminded in this connection of Milton's lines:

> And ever against eating cares
> Lap me in soft Lydian airs.

Were the heads of the medical profession to examine the virtues of this music-remedy, doubtless it might be found capable of scientific application in a marvelous way. It may be that imaginative romance is ahead of theoretical research in this respect. Yet few others are so skeptical as educated musicians regarding the extraordinary emotional influence often attributed to music by novelists who, from their own showing, are strangely ignorant both of the theory and practice of an art upon which they dilate in such glowing terms.

Assuredly in this as in all other domains of research, though ignorance may long be a stumbling-block, knowledge is power. A clearer understanding of the aims and possibilities of music, of means for getting practically acquainted with its various departments and branches, is the first desideratum. We would therefore appeal not only to those already acquainted with the practice of music, but also to the vast circle of *listeners to music*. These should learn what is implied in the work of true creative and executive artists, whereby they sway the emotions and uplift the minds and lives of all who listen well. The hearing ear and the seeing eye are alike necessary to the appreciation of arts that appeal to them respectively.

II. HOW TO LISTEN TO OPERA

By E. Markham Lee

Feelings of Disappointment—Expectations—The Language Difficulty—Why the Story is Hard to Follow—What We Go to the Opera to Hear—Some Suggestions—To Grasp the Story—To Realize the Style of the Music—Rehearing Necessary—How to Begin to Study Opera—What is Necessary for its Enjoyment.

IN this chapter we have no thought of laying down the law to those already wise in the things here discussed. The musician and the opera habitué will not need telling how to listen to opera, nor how to enjoy it.

At the same time it must be borne in mind that to the very large majority of young persons their first introduction to opera raises a feeling of disappointment. People vary much, and there are those to whom the charm of music is so great that the most unfamiliar harmonies will convey delight to their ears and satisfaction to their minds. But this is exceptional rather than the rule, and it is to be feared that the neophyte, visiting the opera in a state of glorious ignorance, generally comes away with an inglorious feeling of unrealized ideals and unattained expectations.

To the average schoolgirl, for example, opera suggests various fascinating details read about in books and papers; such as beautiful singing, the presence of fashionable and brilliant persons; tiaras of diamonds

and gorgeous costumes, and a thousand and one other trifles which may or may not come up to expectation. Even if they do, the excitement of such extraneous attributes as these soon palls, and the girl is left to reflect on the opera itself, which is perhaps the most fruitful source of disappointment.

We here assume (what we take to be generally the case) that the boy or girl paying a first visit to the opera has no real idea of what it will be; and in the excitement of the first entry into the large and brilliant house, with its crowd of well-dressed people, a series of miniature shocks awaits the novice.

For sake of example we may take an averagely intelligent and musical girl of sixteen. It does not take her long to discover that she can understand the meaning of hardly any word sung on the stage; a word or two here and there may be caught and mentally translated, but hardly sufficient, unless the girl be specially conversant with French, Italian, or German, to piece things connectedly together, or to gather enough to follow the sentiments expressed. A little natural irritation at not knowing what it is all about ensues.

The words not being caught, as they would be in an ordinary play in the vernacular, it is difficult to follow the story which is being unfolded; an ordinary stage piece may be intelligently followed by a deaf person by means of the eye, but in opera the situations must develop more slowly owing to the musical setting, and there is generally, so far as stage work is concerned, a minimum of action; it is therefore quite possible for our young lady to leave the theater with the very barest notion as to the plot of the opera she has witnessed. Should the work witnessed be of a very popular char-

acter, such as "Faust," various numbers in the music will appeal to her ear as being pleasantly familiar; even in such a case as this, however, there will be much that falls strangely, while with the majority of works the music would be so new that only a confused general idea would be carried away. Not following either the language or the story, the music would be but another factor of confusion to our inexperienced girl, and especially would this be the case if the work presented were of a modern nature, or in a style to which she was quite unaccustomed in any phase of the art.

Such are some of the feelings experienced by young persons taken to the opera for the first time. First impressions are strong, and a feeling of distaste thus received may be hard to eradicate. Before considering how such wrong impressions might be prevented, or at least modified, we must again consider briefly what we go to the opera to hear.

It is not merely beautiful singing, for that can be heard more effectively from the same artists at a concert, when they are unhampered by the necessities of stage action, costume, and make-up. Nevertheless, there are those who are content at the opera with this alone; hence the popularity of certain Italian operas, the success of which depends almost entirely upon pure vocalization and expressive singing, with support of little in the way of stagecraft or dramatic truth. Nor is it excellent orchestral playing that is the main object, for that too can be better heard in the symphony of the concert-room. Nor is fine acting the main consideration—for that we must visit some temple of the drama; nor is it the wonderful development of stage appliance, the marvelous scenic displays, or electric

lighting devices that call for comment: these can be better seen in some house mainly devoted to spectacular presentation.

It is none of these in particular for which we go to the opera, but rather for the combination of them all, which forms the characteristic feature of that complex aggregation of various arts of which opera is constituted. And seeing how many-sided and complex an art-growth it is with which we have to deal, small wonder is it that real appreciation for its numerous points comes but slowly, and only subsequent to experience, perhaps to study.

Now experience and study are just the things of which our imaginary young friend is quite unable to boast; hence the confused and mystified mental condition in which she, in all probability, leaves the opera house. Although easy to diagnose, the remedy for this state of things is more difficult to seek, but the following suggestions may be made:

First of all, make some attempt before going to the opera to master the details of the plot or story. There are many means of doing this. Librettos of all the operas are published, and the plot is plainly set out at the beginning.

So much done, some idea of what is taking place upon the stage can be grasped, and even perhaps some sentences of the libretto followed. Without such help, plots with so much movement and incident as even "Lohengrin" or "Siegfried" may be hard to grasp; but do not make the mistake of taking a copy of the music or libretto into the house with you; the auditorium is generally too dark to admit of their use, and frequent cuts make following a difficult matter.

Having realized the plot, try to get some idea of the style of the music; that is, whether it is an opera of the older classical school (Mozart, Cherubini, Weber, etc.), in which case it will split up into airs, duets, finales, etc., with music somewhat in the manner of the familiar sonata; or if perhaps it be an Italian work (Rossini, Donizetti, Verdi), with the same subdivisions, but of a more tuneful and simple nature; or if a work of the grand opera school (Spontini, Meyerbeer), with massive stage effects and pompous musical utterances; or again, perhaps a modern work in the Wagner manner, with continuous non-divided music, and without definite tunes (melos and not rhythmic air). In this last case, one or two of the chief *Leitmotiven* might be memorized, but we would not advise this class of opera for a first experience; it is too advanced. In any case, do not go without some clear idea as to the manner and style of the music to be listened to. If any of the work can be played through and made at all familiar beforehand, so much the better.

With some sort of nodding acquaintance with the plot and the music, enjoyment may be attained if the work be not too complex. Even then it is not very easy to appreciate an opera at a first hearing. If opportunity arises for a second visit to the opera house, choose the same work that you have already heard. A first visit does little more than create an impression; a second visit will renew old impressions and convey further ones; a third visit would enable one to be on the lookout for parts which have made special appeal; a fourth visit would, as a rule, bring thorough enjoyment, provided the work be well performed.

Of course there are some operas which can be easily

SONG WITHOUT WORDS

From the Painting by Irving R. Wiles

appreciated at a first or second hearing, but these are the great minority, and we would suggest four visits before any judgment is passed. For an ordinary amateur to hear a new work and either praise or condemn it extravagantly is nothing short of presumption. The more experienced and capable the critic, the more reserved is his judgment. For the more complex operas, four visits, unaccompanied by private study or by rehearing of the music, would be insufficient.

Begin with simple operas. Such works as "Faust" and "Carmen," the tunes of which are already known to a large extent, at once suggest themselves; and perhaps in the same category, although in a very different class, may be placed "Lohengrin" and "Cavalleria Rusticana." After a course of easily grasped works, more exalted creations, such as "Don Giovanni," "Fidelio," and "Die Meistersinger," may be approached; and finally we come to the serious works of Wagner's "Ring," such operas as "Tristan und Isolde," the beauties of which are a sealed book to the inexperienced and the unmusical. As is the case with every phase of every art, real appreciation can only spring from real comprehension. That which is not understood cannot be fully loved and enjoyed. There must be a beginning and a gradual growth. Love for opera is hardly an inborn gift; rather is it a cumulative force, fed by an ever-increasing knowledge, and by ever-widening critical faculties. To love music—as singing, or an orchestral performance—does not necessarily imply an ability to care for so polymorphous a work as opera, which must be a thing of separate study, the more difficult in that it demands attention from so many points of view.

And when knowledge and experience are to some extent gained, become not too critical, for that mars enjoyment. Those whose love is freshest for opera are not those unhappy critics who must perforce write a long analytical account of a new work before the final curtain has fallen upon it, but rather those who have grown to cherish the musical phrases for their own sake and for their inherent beauty, irrespective of who may be singing them, provided the singing be good and correct. Love for opera, although not lightly gained, is also not lightly lost; it is a taste that endures and strengthens as time goes on and knowledge deepens. It may well become and continue an important element in personal and artistic culture.

PIANO TECHNIQUE

I. HOW TO PRACTISE

By Annie W. Patterson

Necessity for Practice—Sources of Sound-production—The Pianoforte—Preliminary Preparation—Details of Pianoforte Practice—Suggested Course for Piano—Accompaniments—Dance Music—The Organ—Hymn-playing—Violin, etc.—Time-tables.

THEORY without practice is but the shadow of the substance. Practice, as applied to music, is that preparation as well as preservation work which enables vocalists and instrumentalists to win a public reputation. The musician who cannot give some practical demonstration of his calling, as the result of his practice, holds his title but by courtesy. It is true that many teachers, critics, and composers, though they have attained the highest eminence as musicians, by no means pose as executive artists. The keeping in practice is merely a matter of continuous muscular exertion. It depends as much upon the circumstances as upon the inclination of the individual; but at one time or another, generally in early youth, the musician, properly so called, has gone through some practical drill in qualifying either as singer or performer. All cannot hope to be Pattis or Paderewskis. But we expect a man who calls himself a carpenter to know the use of his tools. So the musician's first care is—or should be—to get acquainted with the use of music-making contrivances by means of practice upon them.

The production of musical sounds comes to us through many channels, the most wonderful of all music-making instruments being the human voice. Vocal practice is treated of elsewhere in detail. In passing, it is interesting to note that, since the development of the modern science of harmony, an instrumental accompaniment—whether it be supplied by the orchestra, the organ, or the ubiquitous piano—adds to the charm of singing. Apart from the growing complexities of solo work, the increasing demand for good accompaniment necessitates a redoubled attention to practice on the part of instrumental performers.

As human ingenuity perfected the instrumental sources of music-making, it became necessary to learn the best mode of performance upon them. The breath, the throat, the tongue, the lips, the arms, hands, fingers, and even the feet (as in organ pedaling), were called into the service of the musician and were taught exertions other than normal. As the musical resources of instruments were developed, more and more assiduous practice was found needful to attain to the desired amount of suppleness and speed in execution. So highly did the great Mozart regard practice in the perfecting of his art, that he is said, toward the close of his career, to have regretted that he had not practised enough.

Of all modern musical instruments none has obtained greater popularity than the pianoforte. "Without a keyboard instrument," says Algernon Sidney Rose in his entertaining booklet "On Choosing a Piano," "no house is considered to be completely furnished." The reason why the pianoforte is an especial

favorite among keyboard instruments is explained by the fact that its accommodating mechanism brings all kinds of music within the scope of listener and performer. Apart from the vast wealth of selection to be found in piano music proper, there is a very large public which intensely enjoys the much-criticised "arrangements" from all the great concerted "forms"—whether of operatic, orchestral, chamber, or Church music—on the domestic instrument. Again, as an adjunct or accompaniment to the voice and most other solo instruments, there is no means of music in the home to rival a good piano. From aiding the child when learning his notes, to assisting the composer in evolving his aspirations, the household piano may well be characterized as the "fairy queen" of the enchanted realm of music. As an ever-ready source of music-making, practice to obtain proficiency upon the pianoforte deserves the primary attention of the musician.

The great secret of beautiful playing on this instrument lies in the independent and well-regulated touch of each finger on the hand. To acquire this power is no easy thing. It may take months, and even years, of patient practice. Our five fingers are unequal in size, shape, and capability. Their positions in regard to the palm of the hand, as in connection with each other, give to every member of the group an individuality which we emphasize when we speak of the thumb, the index, the middle, the "ring," and the little finger. The pianist, at the commencement of his study, knows how much easier it is to strike a note firmly and clearly with the first and second fingers than with those known as the third and fourth. The reason of this is explained upon examining the

tendons of the hand. Both third and fourth fingers are more fettered by digital ligaments than are the remaining two and the thumb. The hand is constructed rather to grasp or to hold than to strike, in the sense in which we attack, or touch, the keys. Preliminary aids to strengthening the arm-muscles, and therefore the wrist and hand action, have been found helpful by many executants. Since the days of Johann Bernhard Logier, who invented the chiroplast, which was supposed to act as a hand-guide, there have been several mechanical contrivances for lessening the initial drill of the pianist. Among these, Macdonald Smith's series of muscular exercises, "From Brain to Keyboard," appear designed upon healthful and sensible principles. Any wholesome gymnastic exertion which will bring the arm-muscles into play and induce a regular circulation of the blood from shoulder to finger-tip, will materially assist the hand in subsequently gaining suppleness and agility at the keyboard.

Coming to work at the pianoforte itself, the student should sit right at the center of the keyboard, with seat adjusted to that height which enables the lower arm, no matter in what part of the gamut a scale-fragment be played, to move parallel to the ground, or the plane of the instrument. The pianist-composer, John Field, among others, recommended the playing of preliminary finger exercises with a small coin on the hand, so as to obtain the tranquil pose of that member. It takes time to get the right art of finger attack. Notes must be struck, not with stiff hand, but with perfectly free knuckle-joints. First, in order of keyboard practice, should come five-finger exercises, those of Aloys Schmidt being as helpful as any others; and, in the

case of young pupils, Mrs. Curwen's "Child Pianist" will be found of great assistance. Then might follow a thorough study of the scales, major and minor, in their various positions. These should be played slowly at first, evenness of execution being never sacrificed to speed. Afterward, to alternate scale-playing, sixths, octaves, and chords may be practised with loose wrist. In these exercises the hand should be allowed to swing up and down freely from the wrist-joint, as if upon a well-oiled pivot, the least stiffening in the forearm muscles being prejudicial to the desired effect.

All these departments of pianoforte drill must be developed gradually, and each species of exercise—five-finger, scale, and wrist-work—requires careful reiteration and daily repetition until perfect facility is gained. To avoid the monotony and drudgery, both to performers and listeners, of such essential strumming, contrivances like the Virgil practice-clavier—in which "clicks" instead of tone register the accuracy of touch—are worthy of consideration. The keyboard can be utilized (1) for the toneless practice of exercises; (2) the registration of degrees and accuracy of attack by means of up and down clicks, weighted according to requirement; and (3) the playing of pieces with the piano in its normal condition—quite a triumph of modern means to an end in aiding the pianist's practice.

Further details of pianoforte practice may be summarized briefly as follows, the scheme being capable of contraction or extension to meet individual needs: Having attained the free knuckle-joint attack of finger, even and clean execution in scale-playing, and crisp,

full grasp of intervals and chords taken with loose wrist, such studies as those of Czerny's or Cramer's might be worked at with advantage. Then should come a progression through the classics, such as is suggested by Charles Hallé's "Practical Pianoforte School." Clementi's sonatinas might lead to Mozart's sonatas, and eventually to J. S. Bach's suites, preludes, and fugues. A course of piece work, varied by judicious drawing-room selections, might be from Schumann's "Album for the Young," through Mendelssohn's "Songs without Words," to Beethoven's sonatas. Miscellaneous playing could include Heller's "Nuites blanches"; Chopin's waltzes, mazurkas, nocturnes, etc.; Liszt's rhapsodies, etc. Among favorite classical show-pieces, probably such items as Mendelssohn's "Andante e Rondo Capriccioso," Weber's "Hilarité" and "Invitation," Chopin's "Berceuse" in D flat, and Raff's "La Fileuse," are a few of the most widely acceptable.

A feature of pianoforte practice should be the playing of accompaniments. Whether for vocal, violin, or other instrumental solos, the pianoforte is an invaluable addition for "filling in" harmonies, and the art of playing accompaniments is one which every pianist ought to cultivate. An accompanist should never be too assertive. At the same time, especially with nervous or uncertain soloists, some "lead," or encouragement, is often required. An experienced musician will know exactly what to do. In the case of amateur accompanists, however, the following hints may be useful. If the attack of a singer is clear and decisive, and every nuance of expression and rate of performance are carefully observed, it is the duty of the accompanist to keep with, rather than anticipate, the solo

part. In all cases the faculty of looking ahead must be cultivated. Even eminent singers occasionally take liberties with the music they interpret. Sometimes pauses are overlooked, or in working up to a climax the speed is accelerated, although no indication that this should be done appears in the notation. Under such circumstances a good accompanist will accommodate himself in such a way to the solo performer that no sense of dragging or want of agreement is conveyed. In this way the playing of accompaniments really implies that the individuality of the accompanist must be subservient to the soloist. This is only as it should be; otherwise the fitting in of parts—the background of the picture—is incongruous.

Accompanying at choral rehearsals is splendid practice in the matter of time-keeping. The playing with solo parts can be learned only by assiduous work with the solo performers themselves. Quick perception—intuition, one might almost say—and the gift of reading at sight are essentials for the successful accompanist. If a friend can be found who is willing to rehearse dozens of songs, or solo violin, cello, or flute pieces daily with a budding accompanist, great progress will soon be made. But accompaniments should not be played rashly, or without due practice and consideration. Before offering to accompany even the simplest song, a player should glance through the music, note sudden changes of time and key, and, while playing, try to adapt his views as to speed and mode of rendering to those of the vocalist. The playing through of operatic rôles, or the trying over of such crucial tests in sight-reading as Beethoven's wonderful violin and pianoforte sonatas, can be recommended

to the advanced student as the best imaginable practice.

Before leaving this subject, a few words might be said about the rendering of dance music. The string or brass band usually supplies the most acceptable aid to ballroom pirouetting. Failing this, the piano is frequently in evidence, and much depends upon the player if dances are conducted with spirit and success. A natural sense of rhythm, as well as intimate knowledge of the steps and positions of the various dances, greatly aids the performer. The main point is to mark strong accents definitely, and not to falter if a slight slip or mistake is made. As in playing accompaniments—and, to a certain extent, dance music is an accompaniment to bodily motion—the best way to become an accomplished executant is to have plenty of practice with the dancers themselves. Just as in accompanying, a fair share of the reading-at-sight faculty is requisite here. Even if chords are occasionally missed, the point is to go ahead, and aim at interpreting the swing of the music. Repeated practice and experience soon enable the player to clear his performance of error. A note-perfect rendering should, of course, be aimed at. Basses need special attention. The habit of some players of dance music, who dash at any bass and fill in left-hand chords by ear, is to be strongly deprecated.

Passing now to consider the organ, we must first remark that it is not so easily accessible for practice as the pianoforte; instruments at musical institutions, public halls, organ builders' establishments, and places of worship—outside the rare occurrence of a pipe organ erected in a private house—offering the student the main facilities for acquaintance with the king of

instruments. A certain amount of manual work, such as the middle portion of J. S. Bach's "St. Anne" organ fugue in E flat, may be prepared in advance at the piano; but the true organ touch, pedal-playing, contrast and balancing of manuals and stop-registration can be learned only at the instrument itself. During organ-practice hours, particular attention should be given to these points, special care being devoted to the use of alternate feet on the pedal-board, and the clean legato grasp, so inseparable from the methods of the best organists. Stainer's organ primer (the Novello series) will greatly assist the learner in these matters. An organ course should include selections from J. S. Bach's chorales, shorter pieces, and preludes and fugues for the organ; Mendelssohn's preludes and fugues and organ sonatas; Handel's concertos, overtures, etc.; and Best's organ arrangements from the great masters. Miscellaneous items may be culled from the compositions of Batiste, Guilmant, Lemare, Lemmens, Rheinberger, Rink, Silas, Smart, Spark, Stewart, Widor, and many others.

An important part of the church organist's duties is the playing of hymns. Various plans are adopted in different churches for the announcement and performance of the chorale or hymn. Possibly the most acceptable, when congregational singing is encouraged, is that the officiating clergyman should first give out the number of the hymn and read an opening line or stanza, the organist afterward playing over an opening phrase. The beginning of a hymn is important. After the announcement and phrase-playing, as described, the performer should make a distinct break, taking the hands entirely off the keyboard. The tonic pedal should

then be decisively sounded, and the choir trained to come in with absolute exactitude on the initial manual chord. When singers—as is often the case with amateur and rural choirs—are inclined to drag, some bright octave or four-foot stops should be drawn, and chords may even be played in a slightly detached or staccato manner until the correct rate of speed is restored.

The words of a hymn should always be watched carefully by the player, so that the sense of the verses may be reverently and becomingly interpreted. In a line like "In life, in death, O Lord, abide with me," a good musician will so account for the commas—making a suitable rallentando at the same time—that the contrast intended may be conveyed without undue exaggeration. Color-painting, with appropriate stops, is quite legitimate if not overdone. At the same time, great discretion and good taste are demanded from the performer in this respect lest anything in the way of ludicrous effects be unconsciously produced. The roaring of lions and a tempestuous deep do not always call for the thunder of a trombone pedal-stop. Often the use of soft sixteen-foot stops, or even the lifting of hands off the manuals so that the voices may sing unaccompanied, has a thrilling effect at solemn passages. When a strong forte is demanded, a full rather than strident registration should be sought for. Stop-combination depends on the nature of individual organs. The oboes on some instruments are execrable, while on others the delicate reedy flavor of such a stop is a coloring inestimably useful both for solo and accompaniment work. Experience and practice on various types of organ can alone teach tasteful stop-registration.

In practising the violin, the cello, and kindred instruments, certain portions of the pupil's time should be devoted to such matters as bowing, phrasing, the production of harmonies, etc. As in the case of practice upon most wind instruments, seclusion of the performer is advisable. A piano is generally located in a drawing-room, and usually must remain there. But a violinist may betake himself and his fiddle to a garret, and there draw forth preliminary wails to his heart's content. Advice to violinists, and to players on most orchestral instruments, might be summarized as follows: Select a remote quarter for preliminary practice, so as not to disturb others. Aim, when practising, at beautiful tone above all things, and learn to control it at will. Never waste time upon practice of pieces beyond the ability, and avoid undue length in selections to be prepared for concert playing. Hear as many good soloists on the chosen instrument as possible; mark their style, phrasing, etc., and prepare the pieces they perform accordingly until individual powers of interpretation are attained. Keep the instrument in good order, free from dust, and always pleasant to look upon and handle. Join a good quartet or orchestra, if possible. Nothing is better than ensemble practice.

A great deal might be written about technical exercises for various instruments. Each teacher and most music-school authorities have their favorite "studies" in the different branches to commend; and no doubt in the multitude of counselors there is wisdom. But the earnest student, no matter what instrument he chooses to excel upon, will soon learn to realize that his chief aims must be the production of beautiful tone

and accurate execution; and to attain to these, the main point is to drill the five fingers, the arm-muscles, and —in the case of vocal music and wind instruments— the breath. The Messrs. Augener (London) have issued a highly instructive series of "Guides through Music Literature," which should prove most helpful to the self-taught student. These include the arrangement of pianoforte, violin, violoncello, organ, and song exercises and pieces, graduated according to difficulty. These, with such publications as Charles Hallé's "Practical Pianoforte School," already mentioned; the Studies of Cramer, Czerny, etc., and Köhler (for very young pianoforte students); the famous Violin Schools of Bériot, Hermann, Spohr, Vieuxtemps, etc.; the Violoncello Etudes of Davidoff, Dotzauer, Duport, and others—most of them brought out cheaply in the "Edition Peters" (Leipzig); Organ Albums of Best, Rinck, etc., together with the chorales, preludes, and fugues of J. S. Bach, and Mendelssohn's preludes and fugues and organ sonatas, should form good groundwork for solo players on these different instruments. The catalogues of the eminent firm of Breitkopf and Härtel (Leipzig) contain also most of the essential studies for performers on all instruments, while the stringed trios, quartets, etc., of Haydn, Mozart, Beethoven, Brahms, Schumann, Dvořák, etc., offer ample material for really devoted study and practice.

Regarding the time for practice, morning hours are best when these are convenient. Practice should not be persisted in at times unpleasing to other people, no matter how much the enthusiast may desire to play scales at 5 A.M., or polish up show-pieces with mid-

night oil. The preparation of regular time-tables of practice is to be recommended, if resolution is sufficiently strong to adhere to them faithfully. The following proportional division of an hour's daily practice upon any instrument may be suggested: Devote ten minutes each to (1) arm, wrist, and finger drill; (2) scale-playing; and (3) technical exercises. The remaining half-hour of the time could be divided into segments of twenty minutes to the classical, and ten minutes to the secular piece under immediate study. A division of this kind may be considered a fair apportioning of labor, as it gives half the time to drill-work proper, and half to applying the drill. One hour a day seems quite enough for young children, nor should the delicate overstep it without due consideration. It may also be found sufficient to keep a trained player's hand in, and if judiciously spent it is more helpful to the student than three hours or more. For the mind is apt to wander, and physical energy to grow weary, during a protracted period. If, however, three or more hours must be given daily to practice, it should not be taken consecutively but with intervals for rest or exercise between. The amount of time given to practice must, however, be left for individual decision according to inclination and circumstances.

II. THE PIANO AND HOW TO PLAY IT

By Mark Hambourg

A Modern Instrument—Spinet and Harpsichord—First Piano—Development and Use of the Piano—Great Composers and Players—Study and Practice for the Piano—Outline of a Course of Work.

WE are all so familiar with the modern pianoforte that the fact of its being an entirely modern instrument is apt to be overlooked. Yet, whereas musical instruments of one kind or another have existed from the very earliest times, the inventions that gradually led up to the piano as we know it to-day were not made until about 1720, and no very material advance was made till considerably later than that date.

The most familiar forms of early stringed instruments played with keys like the piano were the spinet and the harpsichord. The world's first pianoforte was invented and produced by Bartolommeo Cristofori, a Paduan harpsichord-maker. His invention of the escapement and check action early in the eighteenth century opened up such wonderful possibilities for the instrument that from that day harpsichord-makers and inventors everywhere brought their attention to bear on the subject, and pianos of various kinds were manufactured with varying success by a number of different makers.

About the year 1800 John Isaac Hawkins, an English

civil engineer living in Philadelphia, invented and produced the cottage piano, or upright grand. In his original instrument he anticipated almost every discovery that has since been introduced as "novel," and the whole history of pianoforte manufacture began to undergo a complete change from that time.

Having spoken of the development of the instrument, it may now be as well to speak shortly of the development of its players and the music that was written for it. From the time of Palestrina to that of Bach and Handel instrumental music was written chiefly for the organ. From then till the time of Beethoven, Haydn, and Mozart, instrumental music quickly developed; the piano took a predominant place, and there rapidly grew up a romantic school of musicians, among whom may be mentioned Schubert, Weber, Mendelssohn, Schumann, and Chopin. The last named, I venture to say, represents the climax of the development of pianoforte literature; for while all the great musicians from Bach to Chopin contributed their best ideas and creative power, yet Chopin was undoubtedly the bard, the tone-poet, the soul of the instrument. In his music we find all that is best and most full of meaning, his works containing all those varying contrasts that make piano music so fascinating. Tragedy and romance, heroism and fanaticism, lyricism and dramaticism, grandeur and simplicity, brilliancy and restfulness, all are there, and his changing moods follow each other in such quick succession that his music exercises a peculiar charm upon every one who listens to it.

Clementi was the first of a school of virtuosi, among whom may be mentioned Steibelt, Dussek, Hummel,

Field, Kalkbrenner, Hertz, and, more recently, Dreyschock, Schulhoff, etc., who were virtuosi of the dry order. Although some of them used their virtuosity in a powerful way and others in a delicate way, they all used it as an end instead of as a means to an end, and all of them played, as a general rule, compositions that gave them an opportunity to show off their brilliant technique and their ability to conquer the greatest difficulties.

Liszt and Anton Rubinstein were the giants who combined great virtuosity with intellect, feeling, and imagination, and it is through them and their followers that piano-playing has reached the highest standard.

In just the same way that almost every one has a different voice, so has almost every one who plays the piano a different touch; and just as the voice can be improved by training and practice, so can the touch be altered. It is toward the matter of touch that the earliest lessons of the pianist should be directed; for the piano is such a sensitive instrument that the improper use of a single finger may alter the tone-color of a whole passage, and since tone-color is such an important factor in musical expression, it is of the utmost importance that the student should have perfect command of the keyboard in this respect.

Of course, the first thing a student has to do is to acquire precision, equality, dexterity, and power. The capacity to modulate the tone will follow. The very name of "pianoforte" indicates that it is an instrument of contrasts, and contrasts are of just as much importance in music as they are in speech. Professor Leschetizky once said: "To make a beautiful composition sound dull and uninteresting is no hard mat-

ter, but to make a composition that is itself dull and uninteresting appear beautiful and full of meaning—that is the consummation of the pianist's art!"

Now it will be obvious that, in addition to the ordinary study and practice that are necessary for the acquisition of technical facility, study and practice of an entirely different kind are essential for the cultivation of what may be termed the musical ear, the possession of which is absolutely indispensable. The student must be able to distinguish intervals and chords with discrimination, as well as pitch and all the shades and qualities of sounds, and must train his ear until he can unhesitatingly distinguish every degree of power, beauty, meter, and rhythm. In very many cases it will be found that, while the ear can easily be trained to distinguish intervals and chords, it cannot be so easily trained in other ways; indeed those who have a perfect ear for pitch are frequently quite deaf to qualities of tone, and vice versa. The fact is that the ear is a delicate organ which has to be very carefully treated if it is to do its work to perfection. It is an interesting fact, for instance, that in cases where the ear has constantly to convey certain sounds to the brain, its use is liable to become impaired. It is no very rare thing for the player, say, of a piccolo eventually to become quite insensible, so far as the particular register of his own instrument is concerned, as to when he is playing in tune. He can readily appreciate any mistake made by the player of a double bass or some instrument with a lower register than his own, but, so far as his own register is concerned, his ear may become worn out, so to speak. In the same way the double-bass player may be able to distinguish every dif-

ference of tone in the piccolo and be quite insensible to differences of tone in the register of his own instrument. It is thus with the ear just as it is with the palate, which frequently becomes so familiar with certain tastes as to grow, after long and constant use, insensible to certain subtle differences once easily distinguishable. I have diverged to this extent simply to impress upon students the importance of carefully cultivating the ear in all departments equally, and I will now proceed to speak of various technical points which require special study.

I have already referred to the importance of touch. In no branch of piano-playing is this more emphasized than in staccato and legato passages. Good staccato and legato is very difficult to attain, and it therefore requires a great deal of study and attention on the part of the student. In legato playing the wrist must be kept so steady that a coin balanced upon it remains in position throughout the playing of the passage. One finger must not be raised until the next descends.

In staccato playing, the best is what is known as "finger-staccato," the fingers being made to spring up from the keys as quickly as possible, as though they were touching molten metal, or, in other words, "like a cat walking on hot bricks." There are various kinds of staccato playing, wrist-staccato, wrist and finger staccato, etc., but special attention and work should be devoted to finger-staccato, since this is the kind most used, besides that it develops and strengthens the muscles of the hands and fingers to a very remarkable degree. In staccato as well as in legato playing precision and equality are most important, and the equality must be not only in touch but also in time.

Speaking of equality in touch and time, I may here mention the great importance of devoting plenty of practice to the playing of chords. To obtain proper effect from a chord, all the notes of each chord must be struck with equality of touch, force, and pressure. When practising, in order to make sure that the best effect is being got, the notes of each chord may be divided up between the two hands. After striking a chord several times in this manner and listening carefully to the effect, it is easy to compare the result with the effect produced when the same chord is struck with one hand only. By practising in this way, a fullness and grandeur will be imparted to chord-passages which is very essential.

Before I leave the technical side of piano-playing I should like to call the attention of my readers to the enormous importance of the proper use of the pedals. Anton Rubinstein once explained to his pupils that pedal in piano-playing was the soul and life of sound, since it beautified the tone of the instrument and created many effects which would otherwise be quite impossible. Artistic pedaling is in itself a very difficult art, and requires considerable knowledge of harmony and musical form as well as a highly developed musical taste. It would be easy to write at considerable length upon the subject, but for our present purpose it will suffice if I mention the following essential rules:

Never use the same pedal for different harmonies.

Never use the same pedal for two different phrases.

Do not use the pedal at the end of a phrase unless there is some special reason for it.

Use the pedal for long, melodic notes. In such

cases I always use what is known as the "retired pedal," that is to say, depressing the pedal after striking the note.

All foundation-notes of chords require separate pedaling.

The use of the pedal is very important in climaxes.

Just as knowledge of grammar is necessary in order that a language may be properly spoken and understood, so is knowledge of harmony, counterpoint, and theory necessary to all who aspire to advanced piano-playing. Harmony, counterpoint, and theory are the grammar of music, upon a knowledge of which interpretation and phrasing largely depend. The connection between music and language is very much closer than people usually imagine; music being the expression of thought in sound of one kind, language the expression of thought in sound of another kind. For this reason it is very necessary that all musicians should study declamation. The great actor, when undertaking a new rôle, strains every nerve to make his interpretation of it impressive and attractive, taking advantage of contrasts, climaxes, pauses, emphases, and so on, in order to play upon the emotions of his audience. The pianist's is an exactly parallel case. He, too, must observe his contrasts, his climaxes, his pauses, and his emphases—in short, every movement must be rendered with the emotion that it calls up in him.

This explains the difference which is usually noticeable in the interpretation by different players of the same works. It accounts also for a pianist so seldom playing the same piece in exactly the same way. Pianists are not all equally emotional, consequently

their interpretations vary in some degree; while no player is often swayed by his emotion to exactly the same extent every time he plays a particular piece, and as his performance is but an expression of his mood at the moment, it follows that his interpretations must always vary in some degree.

As to the question of phrasing in music, this forms a particularly important branch of study to which special attention should be given. If you have ever listened to a great speaker, you will have noticed that if he has occasion to make use of the same or similar phrases or sets of words more than once he uses a different tone of voice on each occasion. Were he to use the same tone of voice for each of similar phrases his speech would become monotonous, for although the words he utters are of the first initial importance, it is his tone of voice that brings out their full meaning and makes his delivery attractive.

With this end in view each new work that the student attempts should be carefully studied little by little, mastering its general division in the phrases and then obtaining a different effect for each. A musical illustration that I frequently refer to when writing or talking on this subject is Chopin's 20th Prelude. The theme of this prelude may split up into three phrases. In the first phrase, a loud effect may be used; in the second the melody may be brought out by accentuating the top note of the chord, the whole phrase being played *piano*; in the third, which may be played *pp.*, the alto part can be brought out by accentuating the middle note of the chord. Many other differences may be employed in the rendering of these three phrases, each of which may itself be divided into two or four

subphrases, so that there are literally scores of different ways of playing the prelude, each of which may be equally correct musically, even though some arrangements may not be so attractive as others. The pianist with originality and imagination will discover for himself methods of phrasing each work he attempts, without necessarily binding himself down to any hackneyed rendering.

In giving the above advice I do not wish it to be understood that I would recommend students to fly in the face of existing traditions regarding the interpretation of certain works. In a general way traditions should be accepted, since they are the result of the experience of the greatest virtuosi. But the student should be influenced and not enslaved by them, and when his mind and musical knowledge are properly developed they may receive the impress of his own individuality.

When once he has mastered the art of phrasing, the student will be in a position to introduce into his playing that "tone-color" without which music is cold and unconvincing. If one studies the works of the great composers one cannot help remarking upon the largely different methods that each employs for the introduction of color into his music. The student cannot do better than examine the works of Schumann if he wishes to acquire a knowledge of beautiful color-schemes. Indeed, I regard the study of that master's work as a very important factor in musical education, since the pupil will thenceforward be able to compare the color-schemes of other composers with those of one who was in this respect master of them all.

As regards what musical literature should be studied,

while, of course, it is impossible for me here to deal with such a question fully, I may yet perhaps outline a rough course of work.

For beginners, I recommend the études of Czerny, known as the Etudes de Vélocité, 40 Daily Studies, and the études, Op. 740 (4 books); also the Cramer études, Hans von Bülow edition. For the higher development of technique, I recommend Clementi's "Gradus ad Parnassum," Tausig's edition; Chopin's études, Op. 10 and 25; the Schumann-Paganini studies, and all the Liszt and Rubinstein studies.

The compositions to be worked upon should be selected from the sonatas of Haydn, Mozart, two and three voice inventions and preludes and fugues of Bach, Scarlatti, Dussek, Clementi, Reinecke, Hummel, Weber, and Beethoven; the nocturnes of John Field, various compositions of Hiller, Moscheles, Thalberg, etc.

Of the romantic school, careful study should be given to selected works from Schubert, Mendelssohn, Schumann, Chopin, Rubinstein, Liszt, and, among quite modern composers, Brahms, Grieg, Tchaikovsky, César Cui, Rachmaninoff, Arensky, Saint-Saëns, and César Franck.

I also strongly recommend all students to play, if possible, ensemble music; that is to say, with a trio or quartet of stringed instruments, or even with another piano part, since this helps to develop a knowledge of rhythm and the power quickly to interpret the meaning of a composer.

In conclusion, I would emphasize the great need there is for emotionalism and originality in music. Here, as nearly as I can remember, is something that

Rubinstein once said: "The musician who only plays the music of a composer correctly will never move from the ranks of the mediocracy. Only when he learns to express the inmost thoughts of the composer and the breadth and greatness of a composition will he himself have a chance to become great. To be able to execute a musical composition one has to work hard to master the technique, but to interpret it well, much more than technique is required. What is wanted is the capacity for feeling, imagination, and analysis. The pianist who possesses these qualities is able to transform a poor composition into a beautiful one. Even in the works of great composers he will be able to discover and bring out effects which the composers themselves omitted to mark, or which did not occur to their minds. Mediocrities are afraid to be individual and original, though those who have no talent for originality or individuality may be very good executants."

III. THE OCTAVE STACCATO

By Xaver Scharwenka

Positive and Negative Staccato—Position and Attack in Each —Production of the Octave Staccato—Development of the Muscles Used in Staccato Playing.

THERE are two kinds of staccato, the positive and the negative. These may be subdivided and named according to the particular anatomical joints that come into play in the different species of attack. Thus we speak of elbow (or forearm), wrist, knuckle, and finger staccatos, and finally these forms occur in every imaginable combination, two, three, or all the joints acting simultaneously.

In the production of the positive staccato the member used in the attack is held above the keyboard at a given point, the distance of which is determined by the volume of sound required. The seat of the motion depends upon the kind of staccato to be produced. It may occur in elbow, wrist, knuckle, or finger joint; but in all cases the attack is made swiftly and with a rebound, the attacking member being brought back immediately to its original position above the keys, and kept there till the playing proceeds.

In the production of the negative staccato, on the contrary, the member used in the attack is in contact with the keys. The fingers must *feel* the keys. The attack is made by a sudden pressure, after which the

attacking joint is swiftly withdrawn, to be brought back to its original position in contact with the keys.

In octave staccato we must pay special attention to the position of the hand, the elasticity of the joints, and the sources of strength brought into play in the movements of hand and arm. It should be observed that the position in octave staccato is unlike that usual in the playing of scales. The hand must point outward, so that it forms an angle with the arm. This enables the thumb to reach both the upper (black) and lower (white) keys. The thumb, which is bent a little, is held at an angle of forty-five degrees to the keyboard, resting on the lower key near the upper one in negative staccato, and above the white key in the same relative position in positive staccato. The thumb is straightened out in moving to the upper key, which should be near its tip, the other fingers remaining slightly bent.

This position of the hand, combined with the movement of the thumb just described, makes unnecessary the forward and back movement of the arm (from the shoulder), which has so bad an effect on the equality and rapidity of the successive tones. The upper arm, however, must carry the hand (and forearm) in its motions to and from the center of the keyboard, and not remain passive, as is the case in ordinary finger exercises. The attack itself, which follows these preparations, is made according to the laws of the staccato.

In the production of an octave staccato in quick tempo, the wrist-joint is usually the hinge which is the seat of motion. In slow octave movements, requiring a greater application of strength, it is better to

use the elbow-joint. The hand must always keep its elasticity. This is of the greatest importance, from its influence on the quality of the tone. A hard, rough sound can usually be traced to stiffness of the wrist, even when the wrist itself does not enter directly into the attack, as, for instance, in running a scale.

Attention should be given to the fact that in the production of the octave staccato by a combination of the elbow and wrist joints the forearm originates the motion, while the wrist-joint remains flexible like a hinge.

The source of the strength used in the production of a wrist-joint staccato is derived from the lower arm, that for the elbow-joint staccato from the upper arm. In combinations of the two joints, much attention should be paid to the rational development of the muscles separately and in unison. Repetition in octave staccato is a special subject requiring separate study.

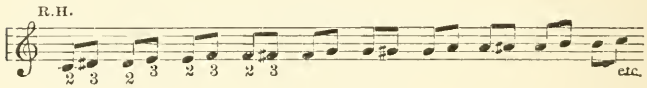
It may be well to state that the fatigue which is produced so easily, and the resultant stiffness of the wrist, may be avoided by an up-and-down movement of the forearm at the wrist. The lower arm supports the movements of the hand.

IV. THE TWO-FINGER EXERCISE

By William Mason

Rhythm in Technical Practice—Value of Accent—Control of Muscles—Elasticity, Rigidity, and Relaxation—Correct Attack.

SEVERAL of Liszt's pupils who have since become famous were once discussing the amount of time wasted in dry mechanical exercises—time which, better applied, would speed the student well on his way to virtuosity. Liszt came by and listened. "All true," said he, "but there is one little exercise which has come down from Hummel that I never give up. It does me more good than anything else."



Although Liszt was too musical to practise unrhythmically, he played this two-finger exercise on this occasion without rhythmical form—simply as a gymnastic exercise on the keyboard. When I came back from Weimar and began to teach, it occurred to me that the mind was not infinite, but finite, and required a definite beginning and end to all its mental processes; that it could not preside successfully over a series of motions repeated indefinitely—that is, without symmetrical form. This discovery was an entirely new stand-

MUSIC

From the Painting by G. van den Bos

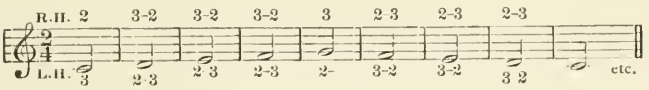
point for the study of technique, and I have lived to see the idea of rhythm as a factor of technique leaven all the judicious teaching in America. "It is strange," said Moscheles, in his "Recent Music and Musicians," "that no one has ever thought of writing scales with accents. One day some one will found an instruction book on this plan." But scales had already been taught thus in New York for ten years.

It is a practical fact that the mental energies will co-operate to carry the fingers through any given correlation of motions of which the end is foreseen, when they will flag and fail in the same routine if not braced to reach a certain definite goal. I applied this principle most successfully in the cultivation of velocity in scales and arpeggios by what racing men would call "spurts," as set forth in my "Touch and Technic." Even in the study of the elementary exercise with which this paper deals, a pupil will soon acquire a neat and precise delivery by the use of accents, when without them he will falter and stumble helplessly. Accent concentrates the thoughts, introduces symmetry, and therefore comparison, and thereby makes the first steps toward equality of touch and toward feeling for phrasing. There are two other advantages to be derived from the use of accent. Each accented tone should be preceded and followed by a tone contrastingly light. Thus the tension of the accenting fingers is followed by the relaxation of feeling caused by the preparation of the following soft tone. This promotes an elastic and controlled attack, and as a consequence a musical quality of timbre. Coincident with the cultivation of the rhythmic instinct arises a desire for intelligent musical expression. Thus the artistic talent

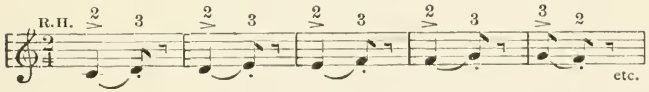
of the student is awake and active from the first lesson to the last. Properly applied, the principle of accent brings the whole field of technique—scales, arpeggios, double notes, chords, and octaves—under control. A lady once asked whether Schumann wrote "Kreisleriana" to illustrate the two-finger exercises, or Mason got the two-finger exercises out of "Kreisleriana." That is a good example of the way in which these accented motions enter into the most advanced technique and the most romantic composition.

The first step toward any correct motion whatever in piano technique is to obtain control of the muscles of the fore and upper arm. Draw your finger sharply from the key, and at the same time drop your wrist and watch how the muscles concerned contract almost up to the shoulder. Before your finger can make a correct attack on a key you must learn to relax all these muscles at will. "Devitalization" is the modern word for this complete relaxation. Perhaps "limpness" is simpler and more expressive. After the attack the muscles used must immediately become limp, and the muscles which should not participate in the motion must be limp all the time. To acquire this control, practise letting the whole arm fall so that some one finger—say the index—comes in contact with a key, and hooking on to it prevents the arm from falling farther. This is "attack by weight." "Attack by weight" and "attack by stroke" produce totally different qualities of tone. The mellow and full quality obtained by attack by weight should be acquired as soon as possible. The exercise described above may be called the "drop and finger-tip." It should be practised with each finger separately. When you have

observed the sensation of the muscles of your arm so that you know when they are contracted and when relaxed, study the following exercise. Begin every exercise with a down-arm touch—i.e., attack by weight, but proceed with this one with attack by stroke.

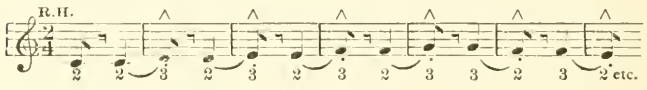


Lift the fingers high from the knuckle-joints and bring them down promptly and firmly upon the keys. The muscles of the attacking finger, which are located in the forearm, may be tense at the moment of stroke, but must relax as soon as the attack is made and the weight of the finger has settled on the key. In any technique where the seat of the motion is in the knuckle-joints the finger must be elastic, free from the weight of the arm until after the attack is made. When the finger has acquired the ability to rise freely in the knuckle-joint the process of strengthening that joint begins. This I accomplished by means of the following exercise, which must be practised by each pair of fingers in turn.



Raise the index finger in the knuckle-joint and strike C (the first key) with an accent, and therefore with some muscular tension. Stretch out the third (middle) finger and flex it inward suddenly so that the tip touches the palm of the hand. Do this firmly, but

without accent; the tone produced must sing. In practising this exercise very slowly, to strengthen the fingers, there may be some tension in wrist and forearm. But later the whole arm must be perfectly quiescent, while the muscles belonging to the attacking fingers are in elastic tension during stroke, and then immediately relaxed. There is a difference between elastic tension perfectly controlled by the will and that turgid rigidity of the muscles from which they refuse to recover. An habitual condition of involuntary contraction originates all the abominable sounds made by heedless thumpers, and is responsible for nearly all the failures of diligent students to acquire execution. In extreme cases it produces cramp, and ultimately scrivener's paralysis and weakened sinews. The palm of the hand in particular must not be allowed to become rigid. The normal condition of a pianist's hand in the act of playing is one of controlled elasticity, combined with relaxation at the completion of each motion; that is, the hand must not be flabby—it must be supple. In all correct attack three moments are clearly discernible: that of preparation—this should be deliberate; that of attack—this must be as swift as thought; that of recovery—this must be conscious. No matter to what point velocity may be carried, the mind must will and cognize these three different operations. When the fingers have all ascended and descended the scale, in the above exercise, let it be repeated as follows:



Here the attack of the first finger is unaccented, and the strong accent of the second finger is accomplished by a quick, tense pressure, combined with a flexing motion, which brings the finger-tip to the palm of the hand, as before. Neither form of this exercise is complete without the other, but practised in alternation and with different degrees of energy and speed, the two become the most valuable foundation for technical study. The principle of studying passage-playing by varying the rhythmic accent is technically most important. The most refractory run studied alternately in rhythms of three, four, six, and nine, becomes plastic and certain. Long rhythms are best for the purpose, because they promote greater smoothness. Scales, arpeggios, and figurated passages should be systematically studied in this way, and the result will be a fluent execution and a limpid tone.

V. ATTACK BY STROKE

By S. B. Mills

Rubinstein's Prophecy—Fundamental Methods of Attack—Stroke-playing—Production of Accented Tones—Legato Playing—The Full Tone—How to Acquire a Fine Tone.

RUBINSTEIN once said to me, "The newfangled notions of technique, by which legato and cantabile playing are sacrificed to the effort to obtain orchestral effects, will some day give place to the old ideas of Hummel and Moscheles." He lived to see his prophecy fulfilled. The technique of Paderewski, orchestral as it is in passages demanding such treatment, is grounded in the pure finger-motions taught by Czerny and Hummel. To their finger-work both Rubinstein and Paderewski owe the charm of their singing tone, their exquisite legato, and their superb treatment of all cantabile and polyphonic forms.

The idea of equalizing the touch of the five fingers is not very old. My father was for many years organist of Gloucester Cathedral, England. Dr. Crotch told him that, when Frouburger came from Germany and played Bach, every one was astonished at the peculiarity of his technique, and said, "He plays with his thumbs." After the new idea gained ground editors began to put a cross over the notes to be struck with the thumb. At first this member of the hand

was pretty much confined to the white keys; now it is necessary to educate it to play black keys and white with equal facility, and with the same tone-quality as that possessed by the fingers. As a means of obtaining these conditions, no composer equals Bach. Bach is daily bread to the pianist.

There are three methods of evoking sound from the piano with the fingers, each useful in its place: (1) The key may be pressed downward by the muscular tension of the finger—this is attack by pressure; (2) it may be pushed downward by the weight of the arm —this is attack by weight; (3) it may be forced down by the velocity of the finger as it descends—this is attack by stroke.

This paper will be devoted to a description of the last method of attack, a form of motion which is the basis of all figurated passages, of legato scales, arpeggios, double thirds, and of the flowing cantabile style.

Attack by stroke is the germ of all fine concert playing, because it produces a tone at once brilliant, firm, and carrying. Properly used, this tone fills the concert-room, while other methods of attack lose in firmness or positiveness what they gain in other qualities. According to Henselt, the normal position of the hand is derived from the length of the fingers. Place your hand on the keys with the tip of the thumb turned slightly toward the palm, the tip of the little finger resting squarely on the key, not turned sidewise so that the side of the nail is in contact with the ivory. The other fingers should be curved so that the fleshy ball of the finger-tip (but not the nail) is in contact with the key. The ring finger should be more curved than the other fingers, to compensate for its weakness.

Special attention should be paid to the knuckle-joints; they should never be depressed below the level of the wrist. The knuckle-joint of the little finger in particular must be educated to stand up firmly on its finger, so as to afford a good bearing for the finger in its stroke.

The wrist must not rise above the level of the knuckles; in close legato playing it may fall below it. Whenever the wrist rises above the plane of the knuckle-joints the weight of the hand and arm comes upon the fingers. The attack then degenerates into attack by weight, and the quality of the tone undergoes a change.

The finger should be prepared for stroke long in advance, and not raised at the moment of attack. The muscles which support the finger in the air should be relaxed at the moment when the opposite muscles bring the finger swiftly down on the key. This is practically impossible if the finger be jerked up exactly when it should be going down. The proper moment to prepare the finger for the stroke is that when it rises from the key whose note has expired. Thus, instead of two opposite and almost simultaneous motions in attack by stroke, there should be only one.

The fingers, however, must be raised to produce the accented tones, not jammed down with a pull from the wrist. The wrist must be perfectly loose, but also perfectly quiet, in stroke-playing by the finger. The higher the elevation of the finger at the moment of attack the stronger the blow and the louder will be the tone.

The school of piano-playing to which I adhere—which is also the school of Moscheles, Rubinstein, and

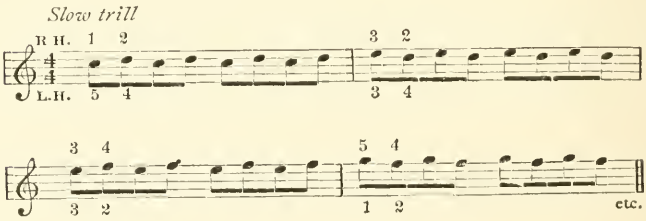
Henselt—was much advanced by the greater deepness of touch and the enormous increase of tone resulting from the discoveries of Henry Steinway and his more famous son. This is the legato school, as opposed to the leggiero school of Tausig and Joseffy. My own conception of legato grew very much, in consequence of the great singing tone and the crescendo of tone, in response to pressure, offered by the piano I play. The touch of the pianist is more dependent upon the action and the peculiarities of tone of his instrument than people imagine.

In legato playing there must be a perfect connection between the tones of the successive notes. This is dependent on the firm pressure upon each key until the precise moment that the next tone begins to sound. In finger-playing the weight of the arm is divided between the shoulder which supports the elbow-joint and the playing finger which supports the hand and forearm. But the weight must always be on the finger which has already struck, and never on the finger which is in the act of striking. In pure finger-staccato all the weight of the forearm is supported by the muscles of the elbow. The stroke itself is exactly the same as in legato.

There is a good deal of tension in the finger while in contact with the key; the muscular pressure of the finger produces the full round tone so essential to a noble legato touch. This pressure is exerted by the nail-joint of the finger, and on the strength of this joint the fullness of the tone mainly depends. Its loudness results from the strength of the knuckle-joint, and its brilliancy and elasticity from the velocity of the finger in its descent on the key. It requires much more

strength to play legato in pianissimo than it does to play forte, because the fingers must be prepared for stroke nearer the keys and the attack must be slower. The demand on the muscles is therefore much greater. Pianissimo practice is therefore very strengthening to the fingers; such a pianissimo as will carry, and sing; the opposite of that weak tone produced by a partial stroke.

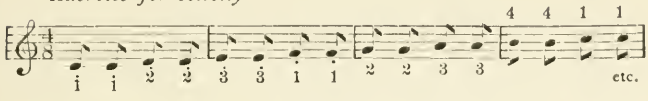
The secret of acquiring a good tone, an equal touch, and great velocity, lies in very slow practice. Piano passages should always be studied forte, forte passages piano, to obtain security of touch. All passages may be reduced for purposes of study to a series of slow trills—i.e., a careful alternation of each note with the note that immediately follows it. When you can play every note in a piece correctly in groups of two notes at a time, then you may play the piece in groups of three and four, but every note should be studied separately with reference to its two next neighbors. Thus the slow trill is the basis of the execution of all music,



and is the first thing to practise. It should be studied with a careful ear to the perfect equality of loudness, and timbre of each tone and of each finger. Do not raise the finger too high, but make the attack as swiftly as possible.

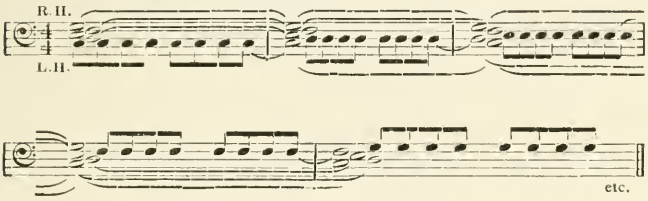
When it is desirable to gain velocity of execution, the following variation is most helpful:

Exercise for velocity



If the fingers are not free and independent the form should be altered thus:

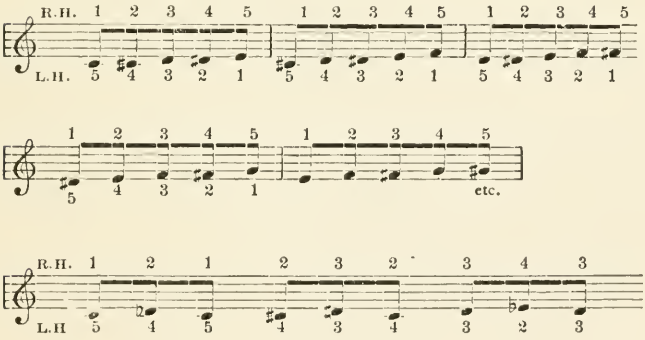
Exercise for independence

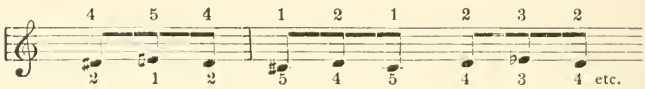


holding all unoccupied fingers down, and with a loose wrist and arm. The arm should always be relaxed.

To obtain perfect equality on all keys, the following exercise is the most valuable that I know:

Chromatic exercise for equality





The ear should not be able to detect the stroke of the thumb by its sound, or any difference between white keys and black.

VI. HOW TO ACQUIRE A DELIGHTFUL TOUCH

By B. J. Lang

Difference in Players—Purpose of This Paper—Individual Qualities—Forty Daily Exercises and How to Play Them.

IT is universally admitted that no two persons produce exactly the same sounds from one and the same instrument; no two persons have quite the same touch; that is to say, the same music played in the same tempo by A and then by B will produce two differing results. The causes of this fact are both too numerous and too obvious to need mentioning.

My purpose in this paper is to aid you to develop as an important part of your technique the power to graduate and vary with freedom and ease the dynamic force of every tone you produce, whether that tone be one of many consecutively and swiftly played, one of a few quite slowly played, or one of few or many simultaneously played.

Be your characteristics of temperament, poetic sensibility, personal magnetism, imagination, etc., what they may, you must zealously cultivate such technical ability as will be serviceable in the more subtle expression of your art, as well as in the well-defined and practical. For the purpose of obtaining the power to graduate a series of tones, to color in divers

ways everything which you play, and to produce the chiaroscuro in pianoforte-playing which is one of its ever-varying charms, I commend to your most industrious pursuit the following forty exercises, each of which should be played not less than one minute at a time, and invariably once a day, together with whatever you may otherwise play during a given month. Practise these exercises slowly, at the rate of one hundred notes a minute for one half the time, and as rapidly as you can the other half.

The graduation of tone should be constantly kept up; but the playing from day to day should vary from the most extreme "overlapping" legato to an extreme staccato, always holding to the one or the other for the whole sitting. You also should sometimes use an abrupt hammer-blow, and at others the most caressing pressure of the key that is possible. Each different method thus indicated should be separately pursued for one day at least. By carefully practising this series of exercises one month in each year, be your general method of playing reasonably good, I can safely promise that you will acquire (to such a degree as is physically possible with you) the means of producing such dynamic nuances in your piano-playing as your artistic nature may conceive.

If you would fully appreciate the importance of all this, try to play a few passages of unusual difficulty quite softly and without here and there missing a sound; the result of such an attempt would probably show that to execute a passage distinctly and clearly and with even force is one thing, while to play it with varying force is quite another. I doubt if any exercises, no matter what their special purpose may be,

should be played without variation in quantity and quality of tone. The very name as well as nature of the instrument which we are trying to learn to use, and whose possibilities we hope to fathom, is "soft-loud." Every pianoforte performer of excellence has become what he is through persistent study of himself and of his instrument.

Physical force, speed, and endurance are qualities of great value, but they must be supplemented by every possible adjunct in the way of power of control. I am trying to excite your interest in a matter that means acquiring ability to control powers which we will presume you already possess to a reasonable degree. Give these simple exercises a fair trial and you will be rewarded for your pains. Invariably charge each set of eight strokes with as earnest a desire to increase or diminish in loudness the sounds produced as you would if those tones were the component parts of a beautiful musical phrase.

Although these exercises are written in E major, they should be practised also in C and B major, and in A flat, D flat, B flat major.

A very helpful companion to these exercises would be the practice of double thirds and sixths in the various major and minor keys, always playing either the lower or higher note of each third or sixth in each hand much louder than its mate. The first twenty exercises are for the right hand, the other twenty for the left.

RIGHT HAND

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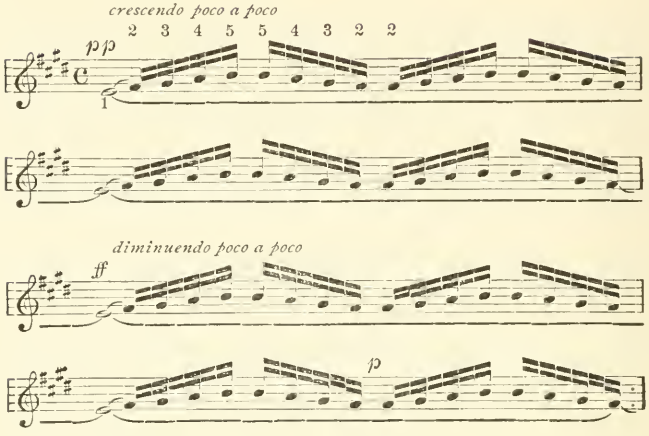

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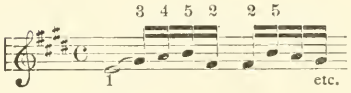

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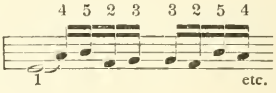

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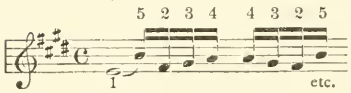

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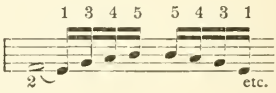

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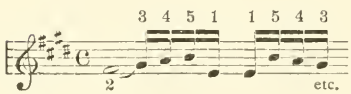

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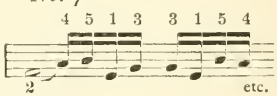

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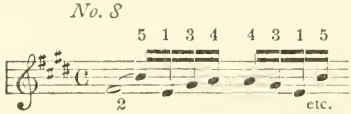

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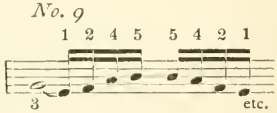

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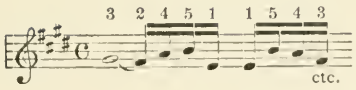

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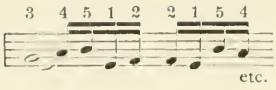

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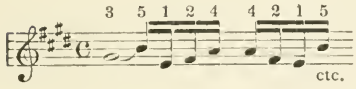

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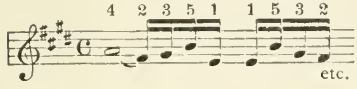

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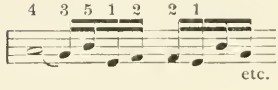

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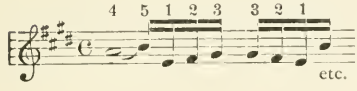

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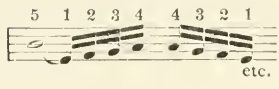

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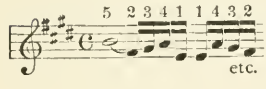

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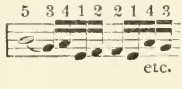

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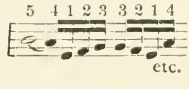

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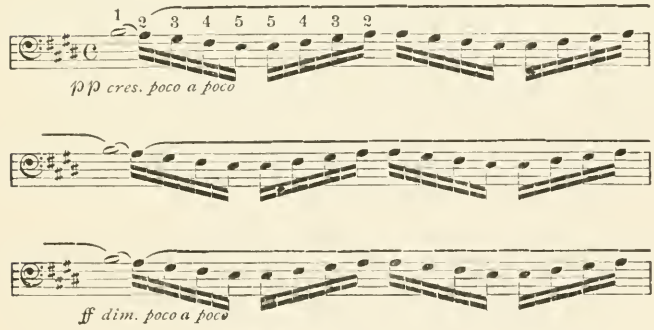

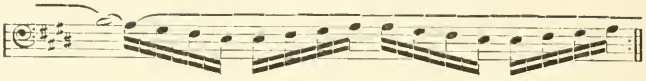

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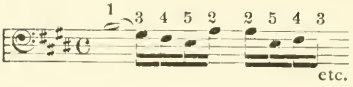

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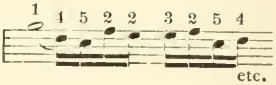

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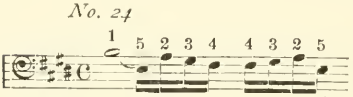

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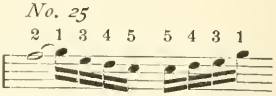

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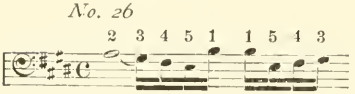

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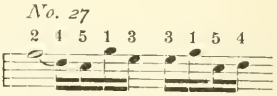

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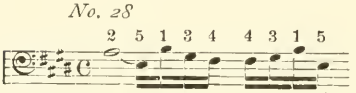

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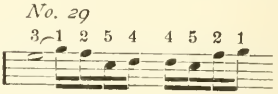

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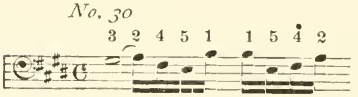

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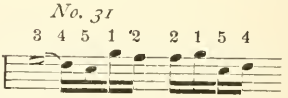

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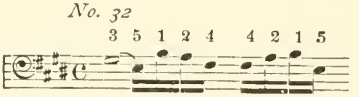

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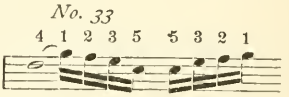

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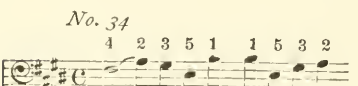

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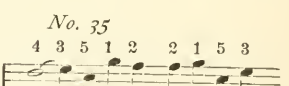

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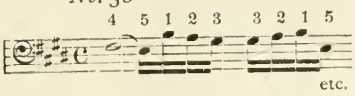

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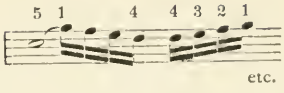

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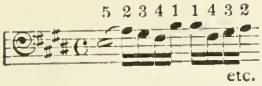

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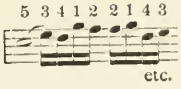

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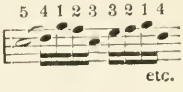


VII. HOW TO STUDY SCALES

By Fanny Morris Smith

A Perfect Scale—Difficulties in Scale-playing—Management of the Thumb—Exercises—How to Hold the Lifted Fingers—Rules to be Kept in Mind.

SCALE-PRACTICE is the beginning and end of pianoforte technique. A beautiful scale is a very rare property even of great piano-playing. A scale is a chain—a chain of notes—and therefore only as strong as its weakest link. There are usually at least two weak links in each octave.

De Pachmann has a remarkably fine scale, and so has D'Albert. These artists know the value of a relaxed shoulder and elbow. Any unnecessary contraction makes itself heard in the tone-quality of the different fingers. The stroke of the ring finger then becomes unduly weak, that of the middle finger harsh and dry. In a perfect scale all the notes are precisely alike, and the tone is full, round, and yet tender. Do you use a metronome? You do not need it for practice, except to determine the tempo. Begin at 80, not two notes to a tick, but two ticks to one note. "One to get ready, and two to go." When you are able to play presto, you may play eight notes to each tick.

There are three special difficulties to be overcome in playing a good scale on the piano: First, there

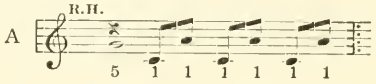
must be no contraction of the wrist and arm, and the stroke of the fingers must be perpendicular. This belongs to legato playing in general. Legato means keeping one key down till the next note struck fairly begins to sound. Second, the motion of the arm in front of the keyboard must be continuous. Third, the thumb must be properly prepared for its stroke, properly controlled during its contact with the key, and properly released from this contact.

The thumb must be prepared for its stroke beneath the body of the hand by placing it under the ring finger as soon as the index finger has fairly struck its note. The thumb should glide over the surface of the keys to its place, and remain under the ring finger till its turn to strike comes. Just before the stroke the wrist rises perhaps a quarter of an inch, to give a little more room. When the thumb has struck, it rests on its key without pressure or tension, very limp, and its joints are turned like hinges by the motion of the arm, which pulls the hand over the thumb and brings the index finger in place over the note it is to play. When the index finger has struck, the thumb glides horizontally to its place under the ring finger. You must not let the fingers on either side the thumb lose their legato. If your elbow is contracted, they will lose it.

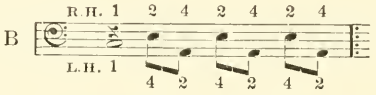
In the opposite case, where the thumb strikes after the index finger and the hand swings over the thumb, a limp, hingelike condition of the thumb-joints, immediately after the stroke, makes the motion of the body of the hand over the thumb very easy. The arm simply moves onward till the finger desired—the third or fourth finger—is over its key. The finger then

strikes, and the thumb is drawn horizontally from under the hand to its place.

To obtain these motions it is necessary to crook the hand inward—i.e., make the ulnar bone the apex of the angle. This shortens the distance the thumb must travel to reach its place under the ring finger, and also the distance the fingers must travel when they pass over the thumb.



Exercise A will train the thumb to pass under the hand properly. Hold the G down with the fifth finger all the time.



Exercise B will train the hand to pass backward and forward over the thumb. Keep the thumb down on A, while the arm moves the hand back and forth in front of the keyboard so that the ring finger strikes below the thumb and the index finger above it.

Both exercises are written for the right hand. They should be reversed for the left.

When not actually pressing a key to obtain sound, each finger should be held up half an inch above the keyboard. The fingers should be raised from the keys without contracting the nail-joint. The arm should preserve a straight horizontal line from the knuckles to the lower point of the elbow.

The following rules should be kept in mind:

1. Correct position of the arm.

2. Muscles of the shoulder, elbow, and wrist must be relaxed.

3. Fingers not in use must be kept raised in the air.

4. No finger may quit its key till another has struck.

5. Lift the fingers perpendicularly.

6. Keep the wrist crooked.

7. Move the forearm horizontally before the keyboard.

8. Keep the thumb in its place prepared for its stroke.

9. Relax fingers and thumbs after striking.

10. Turn the nail-joint of the thumb toward the hand.

Now put away the metronome, and count "one and, two and, three and, four and." Prepare each finger as you say "and," and strike it when you speak a number. Accent the count of "one." This brings the motion into common time.

VIII. RECIPROCAL FINGER ACTION

By Edward Morris Bowman

Up Motions and Down Motions—Bad Results of Careless Up Motions—Normal Touch—Advantages of Quick Motion—Preliminary Exercises for Quick Motions.

COMPARATIVELY few teachers and students of piano-playing properly estimate the importance of quick, correctly timed, reciprocal motions of the fingers. To the average student the down motions represent necessary forethought, up motions non-essential afterthought; down motions produce tone, up motions signify nothing.

The truth is, up motions are the exact reciprocals of down motions; the one must equal and counterbalance the other. This reciprocity is of vital importance. Both motions, therefore, should be consciously foreseen and consciously directed until the habit of perfect reciprocal action has been formed and firmly established. Clearness, fluency, and general control of the fingers depend upon this reciprocal action much more than is commonly supposed. Take as an illustration the trill. How few players are able to trill rapidly and evenly! Pianists wonder why they execute this embellishment so badly, when their scales and passage-playing seem to pass muster. Why is it? Watch the rising finger, and you will observe that it starts and moves more sluggishly than its falling fel-

low. Its motion is not the perfect reciprocal of the striking finger. The training of the nerves and muscles controlling the up motion has been neglected, and, as a consequence, it is utterly impossible to trill rapidly and evenly. Any inequality in the control of the two motions will inevitably produce inequality in the trill. It should be observed that not even the down motions of the average student are as quick as they should be to insure the highest artistic results. Moreover, the tempo of the trill will be governed by the slower of the two motions.

For the same reason, how rarely do we hear a superior scale! The down and up motions are not perfectly reciprocal. The down motion may be quick enough, but it is probable that the up motions are neither quick enough nor accurately timed. Thus the fingers linger on the keys too long, or not long enough, and the result, in the first case, is a slovenly overlapping of the tones, or, in the second, a detaching thereof as though punched out with a die. The lingering pressure is a desirable touch when artistically controlled, but, according to my experience, it is dangerous to employ this touch prior to the mastery of the other as a more fundamental movement.

The touch which should be taught to the beginner at first is that which afterward is to become the normal habit of the hand, and from which every deviation—clinging, lingering, pressing, caressing, driving, detaching, etc.—is to be made. This consists of a vertical down and up motion as quick as possible of the finger, which swings loosely from a very slightly elevated knuckle-joint, and attacks the key with the tip of the vertically poised nail-joint.

Pliant conditions, of course, must prevail in every muscle of finger, hand, arm, and body. There must be no supertension anywhere, either in the muscles directly employed or in those that show a tendency to act in sympathy. From this touch once established every modification may be studied and used with safety.

The advantage of a quick action of the finger is that it secures the best result in tone, power, and speed with the smallest outlay of effort. The reasons for this are apparent: (1) Good quality of tone is secured, because the extreme degree or climax of finger flexion is maintained during the shortest possible time, thereby reducing to the minimum the danger of a hard tone and the obstacle of a flexed hand; (2) power may be secured by quick, elastic movements or by those that are slow and ponderous: the former are best, because the momentum in a quick stroke reduces the degree of muscular force necessary to accomplish the desired result; (3) speed is secured, because pliant, elastic, unrestricted conditions prevail in the hand, and because the fingers, having been trained to quick individual movements, are properly prepared for quick movements in groups. In playing a whole note, for example, the finger that has been correctly trained goes down to the key and is retracted from it with precisely the same speed with which it plays one of a group of sixty-fourth notes. The only difference, then, in the playing of whole notes and sixty-fourth notes is the length of time that the finger remains on the key.

We may lay down this as an axiom: The quicker the stroke the greater the probability of pliancy in the touch; the greater the pliancy of the touch the more

musical the tone. The student will do well to make use of the following preliminary exercises for quick motions.

I. Take your seat at a technic table or a stand of such a height that when you place your hand on it, in position ready to play, the upper side of the forearm from the elbow-joint to the metacarpal joints will decline very slightly. Position taken and finger-tips resting lightly on the table, (1) lift the index finger (the most easily controlled) as slowly as possible to its highest point, keeping it curved, (2) poise it a moment there, (3) let it fall as slowly as it was lifted. See that there is no stiffness or superflexion in any muscle from hip to finger-tip.

II. Set your metronome going at sixty, count four in a measure, and at "four" raise index finger as quickly as possible. Poise the finger perfectly still until you reach "four" of the next measure, at which instant it is to fall with the utmost celerity. Repeat several times.

The motion should be so quick that the outline of the finger cannot be seen during its passage. The conditions of rest and action here are analogous to the discharge of a ball from a cannon. The ball in the cannon is in a state of rest. The powder behind it is ignited, the explosion follows, and the ball starts at full speed on its course. There is at one instant passivity, at the next, activity, and all the time a certain kind of freedom. In this touch the flexion of muscle, like the explosion of the powder, should be for an instant only, and the missile be then allowed to fly to its mark untrammeled.

III. Count three in a measure and quickly lift the

finger at "three"; poise it until the next "three" and cause it to descend as quickly. Repeat several times. Then count two and move at "two." Lastly, move at each count.

IV. Now practise the same series, but alternating the fingers, 1, 2, then 2, 3, and so on, putting each pair through the series above described before proceeding to the next pair.

After a few days' practice on the table—exercise that may to great advantage be drawn out to one or two weeks, according to need—the student may go to the piano, or, far better, to the practice-clavier, and begin with the third exercise. We have in these exercises the beginning of the trill as well as of all other kinds of two-finger exercises, and are thus just across the threshold of a course of study that should end only with the pianist's career itself.

IX. THE ART OF POLYPHONIC PLAYING

By Bernard Boekelman

The Singing Tone—Two Fundamental Touches, Instrumental and Vocal—How to Prolong Vibration—How to Acquire the "Bach" Pressure—Hearing the Parts Separately—Pressure and Expression—Modulatory Changes—Pedal-playing.

OF all varieties of piano technique none is more difficult to acquire than the art of rendering several distinct voice parts simultaneously, known as polyphony. Its most vital factor is a musical and soulful tone, and to acquire this demands in the player more than ordinary mechanical skill. To the superficial critic the piano possesses but little singing power; to the modern piano-player and virtuoso it is a copy of the orchestra. With Thalberg the last "singer" of the piano left the musical stage. He himself tells us that for five consecutive years he studied singing with one of the foremost Italian vocal teachers. Certainly his "L'Art du chant" is a monumental bequest. But, although this work contains many points valuable to the student, it lacks pedagogic experience, and is not based on science. The hints given are but notes of the writer's own practice. What may be the qualities of the instrument, and what should the student do to evoke them, are questions which remain unanswered to both teacher and scholar.

All varieties of touch may be reduced to two funda-

mentals, namely, the instrumental and the vocal touch, the acquisition of both of which is essential to true artistic playing. The latter is by far the most difficult to acquire. A power of artistic hearing, a knowledge of the laws of the contraction and extension of the muscles, a knowledge of the hammer-construction, and the ability to keep up a continuous free vibration of the strings by means of a soft pressure on the keys (not striking or toying with them), and, finally, an artistic use of the pedals, are the principal requirements. It may not be generally known why the sound produced by means of a stroke by the finger has a different effect upon the ear from the vocal sound evoked by means of pressure—i.e., the touch of the key-surface by the finger before the tone is produced. If, for example, one or more tones be produced by means of pressure, and instantly afterward kept up by a constant elastic tension of the respective muscles of the fingers, wrist, and forearm, the vibration of the strings is renewed by the alternate contraction and extension of the muscles themselves. The air which surrounds the strings is set anew into vibration by the pulsation of the muscles, apparent in the delicate movement of the hammer. This renders the quality full and sympathetic, not only on account of the simultaneous sounding of the overtones, but also because the constant vibration of the muscles of the fingers, wrist, and forearm is imparted to the hammer. If the hammer is too stiff in the axis, it will remain stationary without altering the clang-tint, and the strings will give no response to the muscular pulsations. If the hammer is elastic in the axis, it will respond to the will of the player, and the impulse from these renewed vibrations will give the desired

singing tone. The value of pressure extends to chord-playing also. All concert players know that full chords *grasped out* of the keyboard sound far more full and noble in a hall than when struck with full power *upon* the keys. Was there ever a greater giant than Rubinstein in this respect?

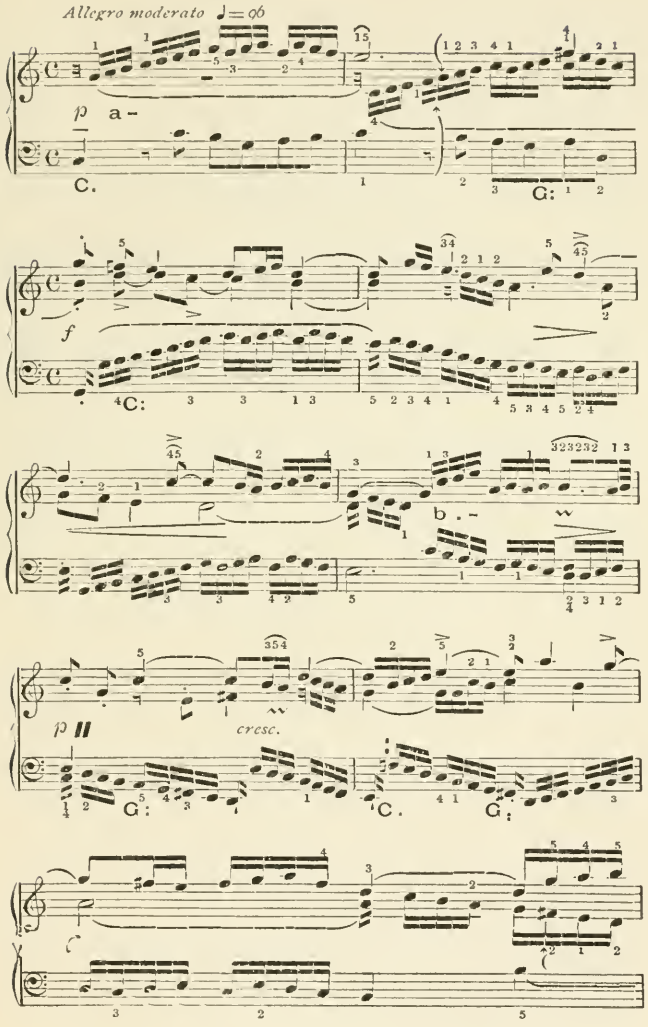
This vocal touch is inseparable from fine polyphonic playing. Its study should begin earlier than is usual. The mere playing of Bach's preludes and inventions in a Czerny style will never result in this true and artistic mode of playing. Our aural nerves should be taught to perceive each tone during its full metrical length. Single notes of a long duration played in the following manner will lead gradually to a perfect singing tone. The requirements are: (1) An elastic tension of the cords and muscles of the fingers, hand, and forearm; (2) the use of the finger-ball (not finger-tip); (3) a well-developed wrist, held rather high; (4) an energetic pressure by the forearm. (This last must be gained by keeping the mind on the vibration of the muscles, and should be first acquired away from the keyboard.) Without this mechanical action nothing is obtained by further developing this technique.

After becoming conscious of the inner invisible strain of the muscles (like the pulling of a rubber band) by focusing the will-power on the muscles of the playing fingers, it is advisable to return to the keyboard. The student will then find the further development of his singing tone in his own will-power. The second and perhaps the most important part of the production of the singing tone is the habit of listening attentively to the duration of the sound, and of preventing its vanishing away. At first, give no limit to

THE PIED PIPER BEGUILING THE CHILDREN

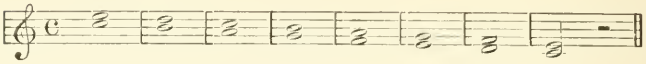
From the Etching by G. J. Pinwell

Ex. II. Reduced to one system.



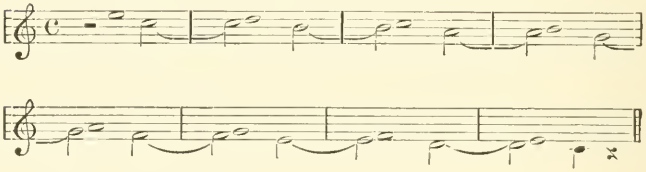
These examples may assist the student to read polyphonic music. Play the parts separately until the eye becomes familiar with them. To acquire this mode of playing, begin with the simplest form:

I. Two-voiced:



Listen to both voices in unison, cut the hearing in two, and be conscious of keeping each entire tone in vibration until the next begins to sound (the easiest and safest road to a perfect legato).

II. The same, divided equally:



Here arises a difficulty which requires all the student's will-power—i.e., to hear the parts separately and jointly. With the entrance of the lower voice we are inclined to drop the upper voice not alone out of sight but even out of hearing. This obstacle must be overcome by patience on the part of the player. It must be removed by accurate hearing and by leaving the faculty of sight entirely out of use. When beginning, learn first to hear the lower voice and secondly the upper.

Should this still prove too difficult, each of the voices may be given separately to one hand, then, if properly rendered, both simultaneously to the same hand. A

transposition to D flat and D is urgently recommended, and should, of course, be practised by each hand separately. Rieman's little work, "Technical Preparatory Studies for Polyphonic Playing," may now be successfully studied, beginning with the simplest forms of two voices played by one hand (page 33, right hand, and page 35, left hand). It cannot be too often repeated, that the greatest pains must be taken (1) not to let the eye dominate over the ear, and (2) to keep the strings vibrating their entire prescribed duration.

The student may ask if all this will ultimately pay. I answer: "If your intention is to express your feelings musically, learn to press these feelings out of the keys; study the principles of pressure, and awaken the electric current between yourself and your listener. Will not this pay?"

Another not less important factor in polyphonic playing is the reading of the parts both vocally and harmonically at the same time. Of course, this is hardly possible without knowledge of elementary harmony and knowledge of proper part-writing. Nevertheless, much can be accomplished if the modulatory changes in the root-forms of the harmony are looked up. The student who is able to recognize the scales and chords can easily locate himself. Take, for instance, a piece written in the key of C: if the first accidental met with is F sharp, the modulation leads to G major, but if D sharp is also given, then to E minor. All that needs to be known is that sharps always enter on the seventh tone of the new scale, consequently the next note is the tonic tone; when modulating with flats, the fourth note of the new scale has the new flat. In minor, the third is minor. This is too practical not to be under-

stood by pupils of ordinary thinking capacity. Constant practice in it will clothe the song parts upon their harmonic skeleton.

The artistic rendering of a polyphonic composition will always be more or less characteristic. The endless varieties of possible vocal and instrumental effects will give both student and accomplished artist plenty of room for individuality and originality. The road to originality is the power gained by familiarity with the rules of esthetics, anatomy, and natural feeling. Tone-coloring by means of the pedal is the final element of beauty in polyphonic playing. Hans Schmitt's little book on this subject contains all needful information. Living examples of beautiful pedaling, like Paderewski's, may be imitated, but pedal effects, like varnish, should only be applied after the picture is finished.

The pressure-touch, formerly and principally used by the master on the clavichord, is the only link left between this instrument and the modern pianoforte; and it seems quite credible, in view of the beautiful expression which was given to the clavichord music, that the listener was often moved by it to tears.

X. THE TEACHING OF RAFAEL JOSEFFY

From the Notebook of Mrs. Henry T. Finck

Much Study Required—Legato and Staccato Practice—Two-finger Exercises—Slow and Fast Practice—Development of the Wrist—Trills—Joseffy's Patience and Care—What His Pupils Study.

TO hear Mr. Joseffy enumerate the necessary qualities of a pianist, and the amount of study it takes to accomplish anything, makes one feel that life is short indeed and art is long. And yet he is a teacher who fills his pupils with enthusiasm and a desire to work, in spite of his great demands on their strength and endurance. He hurries them through an immense amount of music in a year, as he thinks this is the broadest and quickest way to learn. He says: "Everything you study helps everything else, especially when you study great things. However, it isn't good to study one thing too long, for when you are no longer able to advance you necessarily lose." His pupils are required to memorize everything they play. For training the memory he especially favors Bach. In learning a new piece we begin to memorize it at once, committing a few measures every day, for, as he says, "one never knows a thing until it is memorized"; and he calls playing from notes "reading."

He studies his own hand very carefully, and continually discovers new ways of overcoming technical

difficulties, which he shows his class after he has made sure of their efficacy. While such exercises look very easy, when we try to imitate them, it takes very careful analysis to understand them. For instance, perfect legato is made comparatively easy by practising both legato and staccato (wrist, not finger) successively, and then, as it were, combining them. When Tausig first used this pure legato all his critics accused him of playing staccato, for they were accustomed to the Moscheles school of legato portamento. The legato-staccato practice is particularly valuable for the weak fingers of the hand, which so often cling to a note after they should have left it. It also prepares the hand for rapid staccato. The first note in every group of four in Schumann's second novelette is marked staccato, to keep the player from clinging with the thumb. This is only one of many instances in Schumann.

Mr. Joseffy says everything should be practised legato and staccato; very slowly and fortissimo, with the fingers raised as high as possible; occasionally very fast—what he calls a "big tempo"—which acts as a forcing process; in all keys; right-hand passages, when difficult, with the left hand, and vice versa; with different accents, rhythms, and touches; and with the fingers between the black keys. This last is very difficult. It is used to obtain precision, but it must not be done too much, as it is liable to weaken the stroke.

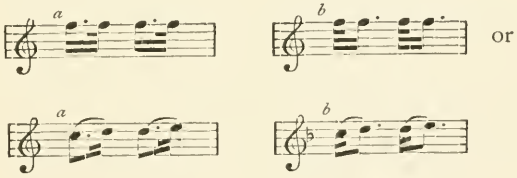
"Two-finger exercises," practised in these different ways, are, in Mr. Joseffy's estimation, the foundation of piano technique, the most important of all exercises, unless he should except the first number in H. Schmitt's Daily Studies, Op. 4—holding a chord in all the different positions and in all keys, then raising and strik-

ing with the fingers one after another. Two-finger exercises, scales, arpeggios, scales in thirds, and such passage-work, must always be practised to a certain extent in contrary motion, as thus the fingers may be more easily watched and corrected. He tells his pupils that, in practising an hour on scales in contrary motion, it is more beneficial to practise thirty minutes always starting with the thumbs, and the other thirty beginning with the fifth fingers, than to devote the whole hour to playing the complete scale each time.

Another important point is, always to practise something more difficult than the special bit of technique one is working for: for instance, if one is studying octaves, ninths should be practised; with chords always bigger ones than those demanded, and in all keys. Mr. Joseffy considers the transposition of exercises a necessity. The wrist must be loose under all circumstances.

He continually impresses the necessity of slow practice on his pupils. To one of them he said: "Play six days slowly, the seventh fast. This is recreation." It is doubtless an excellent motto for all students, but it is not the only way; he also says, "You must not only practise fast things slowly but slow things fast," as this gives great mastery and repose.

Mr. Joseffy's use of different rhythms prepares the hand for both slow and rapid work, as both are used in the same exercise.

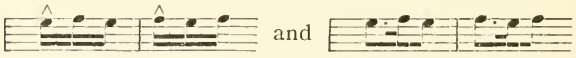


Clementi's "Gradus" may all be studied rhythmically in this way; but if this method is used before the notes are well learned, it will make the hand unsteady.

Mr. Joseffy believes in the use of light dumb-bells to prepare and strengthen the wrist for octaves. Octaves should be practised with the first and fifth, the first and fourth, the first and third fingers, and, by hands that can stand it, the second and fifth fingers. Much can be done toward the latter fingering by stretching exercises at the piano. Chords (usually much neglected, although they are more difficult than octaves) should be practised in the same way, with a very loose wrist.

In long jumps the hand and arm should be turned in an arc from the elbow. It is far better to make a bold, daring jump in this way and miss, than to be too careful and strike the right note. Even Rubinstein was not sure in a jump. Mr. Joseffy says it is a special gift, as much as a natural wrist motion or an even trill.

In practising trills, it is best to hold down one or more notes to steady and give balance to the hand. Long trills should be studied in this way, but if they alone are studied the hand will be quite unprepared for short ones, so part of the practice-time should be given to short trills of three notes, playing with varying accents and rhythms. To make the work more difficult, it



is better to practise trills in semitones, first and third fingers with the thumb on the black key, second and third with the third on the black key, third and fourth

like second and third, and fourth and fifth in both ways. Trills with the thumb and second, and the third and fourth, are the hardest and need the most work.

It is interesting to watch Mr. Joseffy's patience and extreme care in teaching. He never overlooks the slightest mistake in fingering, touch, or technique, no matter how trivial it may seem. He can *hear* wrong fingering in a rapid passage, and one day he gave us a proof of it. One of his pupils was playing, and as he had his back to her and was walking away from the piano he certainly could not see, but he corrected her, and told her to use the third, not the fourth, finger in a certain rapid run.

His pupils study a judicious mixture of Clementi's "Gradus" (Tausig arrangement), Czerny for technique, Liszt for brilliancy and effect, Chopin for delicacy, precision, elegance of style and romantic feeling, Bach for thoroughness and depth (musikalische Solidität), and Schumann for accuracy in rhythm and accent. In a general way this gives an idea of Mr. Joseffy's method, but it should not give the impression that his teaching is limited to these few composers. He freely uses all good studies and pieces. Many are the beautiful things one hears in his class, by great composers like Jensen and Henselt, which are rarely played in our concert-halls.

XI. HOW TO STIMULATE THOUGHT AND IMAGINATION

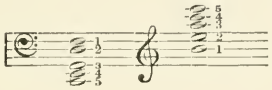
By Richard Hoffman

Overdone Technical Study—Capacity of Hands—Art of Interpretation—Time and Rhythm—Comparative Scales—Modulations—Pupils Should Hear Much Singing, Opera, etc.

SO much of the individuality of the teacher must enter into his musical instruction to others that it is difficult for him to see himself as others see him and to describe with any accuracy the way in which he achieves his results. While I do not undervalue the necessity of technical studies, it has always seemed to me that undue attention is being given to them, often to the exclusion of the higher education in music. Of course, the fingers must be trained by a course of technique full of unaccustomed difficulties, which finally leaves us free to think of higher things. But evenness of tone and of touch is not everything—in fact, nothing *per se*—for we can combine both in the mechanical pianos and organs so much in vogue at the present time. When an artistic player is heard, it is the variety of tone, the infinite shading, expression, and feeling which charm and uplift us. And these are not all the result of technical study. He must have gone deeper than this; and although it is wisely said that poets and artists are born, not made, I think it possible to awaken

the faculties of appreciation, which, added to perseverance and zeal, produce a disciple not unworthy of the master.

A technical stumbling-block to advanced pupils arises from the fact that most of the great modern composers for the pianoforte had very large hands. Henselt, Chopin, and Rubinstein have all written études which are simply impossible for small hands, and I give below the position in which Henselt is said to have placed his fingers upon the keyboard, keeping them there while he read a book held open upon the music-desk.



Hands capable of maintaining this position could play his Etude No. 5, Op. 2, Book I, or Chopin's Etude No. 8, Op. 25, Book II, with comparative ease. Different methods must of necessity be adopted to increase the extension of the fingers. Some pupils have hands so pliable that they can bend the fingers back until they touch the arm; others, again, cannot bend them at all. The average extension of a woman's hand is a ninth, a tenth being rarely reached on the white keys.

It is a familiar experience to find the appetite of the pupil for some coveted piece bringing him safely through difficulties apparently insurmountable. For this reason I put the art of interpretation before overmuch technical study. The passion for playing will stimulate the technique of the pupil, and create resources by its own desire. Reflection and comparison furnish food for imagination. I try to induce my

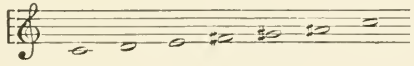
pupils to make an analysis of whatever they may be studying, and also to stimulate research, by asking questions like the following: "Why is it that the great composers, in depicting a storm, have invariably chosen the minor key?—Rossini in the 'Overture to William Tell,' Beethoven in the 'Pastoral' symphony, Spohr in his 'Power of Sound,' Wagner in his 'Walküre' prelude." Also, "Why should the chord of the diminished seventh be always used when the devil appears upon the scene?—Weber in 'Der Freischütz' (Caspar), Gounod in his 'Faust,' and Wagner in his 'Overture to Faust,'" to mention a few instances. Again, I ask them, "Have you noticed that Hungarian airs commence on the down beat, or first of the bar, Wagner's later melodies and subjects doing the same?"

In pursuance of this system, if a pupil were studying Beethoven's sonata in A flat, I should desire to find out his conception of the movement following the funeral march written on the death of a hero. I should ask, "What moved him to introduce this light and almost frivolous theme so close upon the footsteps of the mourners?" In many instances the pupil might be young and happy enough not to have thought out such a problem, but the more experienced mind, and one to whom music has many things to say, will see that Beethoven only depicts the giddy world which goes on amusing itself in an unceasing whirl of gaiety in spite of death and even irreparable loss. In the concluding movement of the Chopin sonata containing the funeral march there is much to be thought out and studied; but only the most advanced pupils would be capable of giving it any meaning, and only *one* player that I have heard has succeeded in giving an absolutely per-

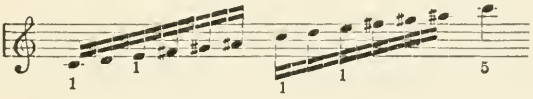
fect rendering of what must be the whistling wind sweeping the hurrying clouds before the face of the moon, and lashing the trees in relentless fury, then moaning itself away like a restless spirit.

Questions would naturally arise suggested by the work in hand, and some of those connected with time and rhythm might not be out of place here—such as: "Where does the accent fall in the waltz—that is, on which part of the measure? Where, in the mazurka? polka?" Again, "Why are so many compositions written in $\frac{3}{4}$ time and called waltzes found to be impossible as dance music?" If the pupil can tell me that the *spirit* of the waltz with the sentiments and feelings which it inspires in the dancers is as much a part of the composition as the dancing motif, it is safe to believe that the Chopin waltzes and mazurkas will receive an intelligent interpretation.

A favorite theoretical question of mine is, "Don't you think the ear could be made to accept, and even like, a scale all the intervals of which are whole steps—thus:



instead of the diatonic scale, where the interval from the third to the fourth and the seventh to the eighth is a half step?" The invariable answer is, "No." "Now play it fast, fingering it as marked."



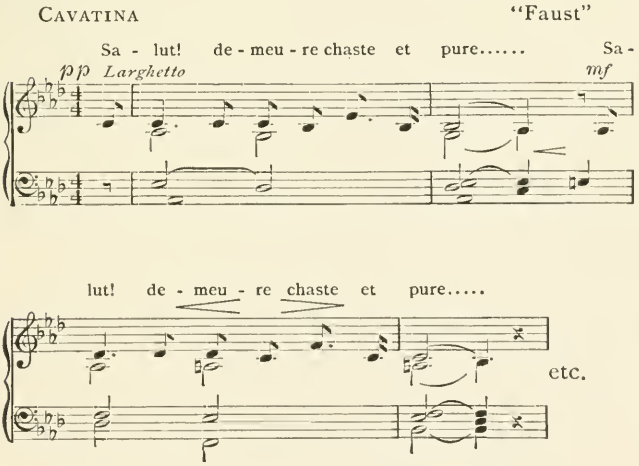
This pleases better. "Yes, I rather like it." This leads to an explanation of the construction of the Scotch and even the Chinese scales, perhaps branching into a description of the Gregorian tones. One can pursue the subject as far back as the old modes of the ancient Greeks with their quarter tones or steps, although we are daily getting farther and farther away from these delicate distinctions. Good violinists have told me that they no longer make any difference in stopping the G sharp and A flat, C sharp and D flat, and the other enharmonic intervals, and one cannot but feel that these finer subdivisions will soon become lost to art. Everything that can interest or stimulate the curiosity of a pupil or tend toward enlarging the scope of his musical ideas is valuable, and while the fingers are resting, the head may work with those finer tools, which together produce an intelligent and finished result.

Another interesting but more intricate study would be following the different modulations of a composition, for instance: Chopin's nocturne in G major, Op. 37, No. 2, or the first movement of Beethoven's sonata, Op. 53.

I advise my pupils to hear as much good singing and as many operas as possible. The ear cannot be better trained than by this means. To hear such an artist as Jean de Reszke phrase and enunciate in the "Salut!" cavatina of the garden scene in Gounod's "Faust," or to be able to recall one's impressions on hearing, and I may add seeing, Nilsson and Campanini in the duo of the fourth act of the "Huguenots," with all its conflicting emotions of love, honor, and despair, is an education in itself. I know that it has influenced my

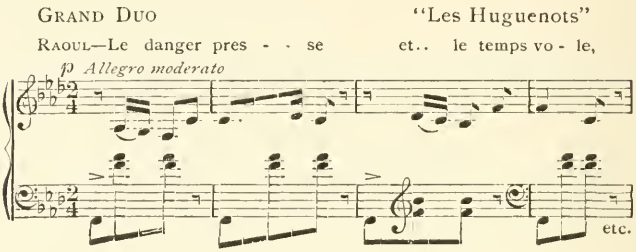
own powers of interpretation, and I look back upon the seventy or more operas that I have heard, with frequent repetitions, in my lifetime, as being one of the sources from which I have drawn my musical education.

I include in this advice all good orchestral concerts where standard works are played, leading my pupils to mark that in all the classical compositions every note is audible and is given to the right instrument—fewer instruments producing by this means as grand an effect as double the number in a more modern work, where a host of players are uselessly spending their strength upon passages which are entirely overpowered by the heavier brass of the present-day orchestra. All this



head-knowledge will be sure to come out at the finger-ends. Those great pianists who can charm their hearers by their interpretations can be quickly counted,

while those who excel in digital dexterity alone are as innumerable as the stars of the firmament.



XII. THE PROPER EMPLOYMENT OF THE EAR IN PIANO-PLAYING

By Constantin von Sternberg

Dynamic Element in Melody—The Pianist's One Dimension—Supreme Importance of the Ear—Illustration from Chopin—Practical Suggestions—Promised Results.

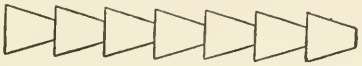
IT has often occurred to me that students of stringed and wind instruments have a great advantage over piano students in the fact that they have no guide for either their intonation or their technique, except their own ear. In giving quality to a tone, in fact while producing a tone, they have to inquire of their ear as to the exactness of the pitch; while the pianist, when noticing an impure tone (something of which some students grow shockingly unmindful), simply sends for the tuner. This lesser dependence of the pianist upon his ear has proved to be very conducive to a neglect of that control which the ear alone can exercise, and thus it comes about that many piano-players do not hear anything more in a melody than the rise and fall of intervals, and the rhythm. The dynamic element is lost sight of; yet it is this very element which most directly appeals to the emotional faculties of the listener, to whom intervals and rhythm are only intellectual concepts. I repeat it, the dynamic element in music is the one which alone addresses our inner life,

our emotional faculties; if beautiful harmonies, melodic intervals, interesting rhythms are to affect more than our mere intelligence, if they are to penetrate into the innermost sanctuary of our feelings, they must be introduced by the dynamic element. A melody played or sung in one monotonous degree of force has no effect upon us beyond awakening a transient interest in its intervals, which is a purely intellectual occupation—in fact, only a matter of observation, if not of mere curiosity. Hence, if it is true that the human voice is the most appealing musical instrument, it must be for the reason that the human voice, in its natural condition, is compelled to make dynamic changes corresponding to the rise and descent of intervals.

Having thus indicated, as far as the limited scope of this article permits, the importance of the dynamic element to musicians in general, I turn to the pianist in particular. To other musicians there exist three dimensions of dynamics, namely, the crescendo: ; the steady tone in any degree: ; and the decrescendo: . The pianist has, strictly speaking, but one dimension at his command: the decrescendo, because that is the only form of tone he can in reality produce. All the other forms he must substitute by artistic deception; he must be an illusionist, as far as the first two of the aforesaid dimensions are concerned. Fortunately, the modern piano offers an almost unlimited number of means to produce this deception, and most piano-players realize this; but of the one form of tone which is legitimately its own many players are totally unmindful, because they have to remember so much about tendons and flexors, wrist action, hand position, technique, and what not, that they fail to

employ that organ which is of supreme importance in music, the ear!

A rapid succession of tones on the piano, graphically demonstrated, would look like this:



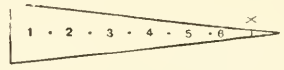
(As I deal with melody, legato is presupposed.)

The sustaining power of the piano is so well developed nowadays, that such a rapid succession, to the human ear, seems to possess a uniform degree of strength. But when the notes of a melody vary in length the matter is very different, for then the pianist has to consider (or rather to feel) the importance of every note as to the musical sense of his melody, and if a long climacteric tone has been reached, the anti-climacteric one should not follow without due consideration as to *how much the preceding tone has already lost of its primary force.*

This must not be grotesquely construed to mean that every piece should constitute one long and continuous diminuendo. By no means. The accent due to the principal pulse-beats ever furnishes new material for the replenishment of force. Nevertheless, I maintain that the diminuendo is the only form of tone the pianist has actually at his command; that it is the handiest word in his vocabulary, and that therefore he ought to pay the greatest attention to it. Let me illustrate through Chopin's D flat nocturne, Op. 27, No. 2:

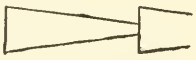
First, a measure of introduction in the left hand. The melody enters on an accented beat, the next tone falls on the second accent, and is shortly followed by

two others, reaching another accented beat of some length, during which a crescendo can be produced in the left hand by accumulation through the pedal, justifying the right hand in participating in this crescendo while rising to B flat in the fourth measure. But here —ay, here's the rub! I know of nothing more heartless than to strike the following A flat in the same degree of strength as the previous tone. It shocks my whole nature when a pianist forgets, in playing this and the following sixteenth notes, how much of its original force the preceding B flat has lost when they become due. A still stronger example is furnished by the following two measures. The A (natural) lasts through the whole measure, like the first part of a trochee, say, "long - - - - - ing," "yearn - - - - - ing," or similars; now, this note corresponding to this design

sounds: 

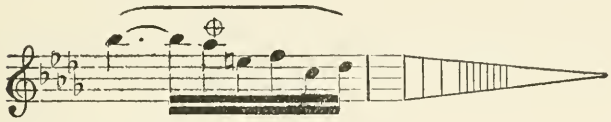
, and the following

B flat ought to be proportioned to the preceding tone, as indicated by the × mark, or enter as piano as the preceding tone has become in consequence of its duration, else the effect is like

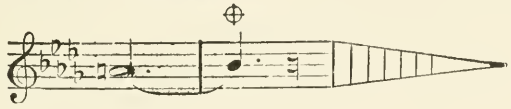


This whole matter is very subtle and elusive, and admits not of dogmatizing, but only of suggesting; nevertheless, something like a frequently applicable rule can be formulated from the above design by those who are not altogether impervious to the musical sense of a melody. I would suggest that whenever a long

tone is followed by a shorter one, the significance of the first (as to accent, and the place it holds in the phrase or period) should be inquired into, and, if it is found analogous to the penultimate or antepenultimate accent in speech, its decline of power during its continuance should govern the strength of the next tone, especially when that next tone occurs on a weak part of the measure, like the A flat (marked ⊕) in this connection,



or in the next measures,



of the piece I quoted.

It will "humanize" the melody; it will give it life, truthfulness, and—the quality inherent to the latter—beauty! I have mentioned here only one matter in piano-playing for the regulation of which the coöperation of the player's ear is paramount; but of such matters there are a great many, hence I wish to bespeak a more habitual employment of the player's ear on general principles. To hear is not to listen—mind! and if this one point now presented should induce some heretofore negligent student to listen more attentively in future to his own playing, I will promise him three very desirable results: (1) A great many other points, which have hitherto never occurred to him, will present themselves to his consideration; (2) he will instinctive-

ly reach an easy conclusion in these considerations and acquire a correct and natural manner of rendering a melody; and (3) all those who have previously listened to his playing out of mere politeness will henceforth enjoy his playing—and that is a rare, a very rare, achievement among students, not to speak of amateurs.

XIII. A CHAT WITH THEODOR LESCHETIZKY

Study of the Classics—Singing Tone of the Piano—Methods with Pupils—Students of Various Nations Compared—Use of Memory.

THAT part of Austria known as the Salzkammergut has long been associated with the history of music, for it was in Salzburg, its capital, that Mozart was born. Possibly it is because of the far-reaching influence of this event that the pretty little village of Ischl, a few hours distant, during the summer months boasts of a larger representation of musical celebrities than does any other pleasure town in Europe. It was in his holiday abode at Ischl that this chat was had with Theodor Leschetizky, the teacher of Essipoff and Paderewski. The writer found a small man, full of life and animation; the most delightful of *causeurs,* in French wellnigh faultless, and with the mild and courtly speech and manner of the traditional Polish gentleman. Imagine yourselves welcomed to his exquisite "Villa Piccola," with its lovely views of mountain and valley on all sides, and some conception of the scene and actors will be attained.

The chat began—a desultory chat. Professor Leschetizky first referred to the study of the classics: "People nowadays think they should commence with Mozart and Haydn; it is with their music, rather,

that the pupil should finish. Modern music makes much greater demands upon the performer's technique. When one listens to Beethoven, one forgets the music. When a student has become able to play three Beethoven sonatas, each differing from the other, well, he can play all the others well."

He laid infinite stress upon the singing quality of the tone. "When I was a youth, I was an intimate friend of Lablache's. I gave up lessons and bought my seats at his performances. Lablache used to wonder at my frequent presence at the opera. 'As I listen to you,' I told him one day, 'I create for myself the rules of song at the piano.'"

He attached the greatest importance to a clear understanding of his pupils' characters. "I talk with them during their lessons, and twenty minutes' speech will often be worth an hour's tuition. I make them draw comparisons, and this work is often more fruitful than playing. When I hear that such and such a pianist pleases one more than he did a month ago, I know that the pupil's powers of reflection are asserting themselves. Of extraordinary value, too, are our weekly reunions. On Wednesday, my pupils—last year they numbered upward of one hundred—meet, and a certain proportion play. Then I am able to study a pupil in presence of an intelligent and experienced audience. The women are usually best prepared, for they have natural finesse and keep closely to the teacher's instructions. The teacher must have a distinct point of view, and the pupil must not lose sight of it. Later he will be accorded more liberty. When the desired end is attained in these assemblies, I discern the pupil's special characteristics. In the course of a

private lesson this would be difficult. On Wednesdays I am part of the public, and the pupil performs as though he faced a thousand listeners. His specialty once revealed, my lessons become wholly different.'

"Schumann observed: 'There are no good teachers unless there are good pupils; the latter must do at least as much as the former.' Russia furnishes the larger number of promising students, and Austria comes next. Northern Germany is strongest in regard to mechanism and rather tiresome clavierism; Norway is well represented, and the King of Sweden has done much to help the cause of music and its exponents. I like the Americans; they are in a hurry, but they are seekers—*des chercheurs*. They are hard workers—too much so, perhaps. I hate being told, 'I worked eight hours today,' when half that time would suffice. Nor do I care to have much ground covered. I prefer two pages played with finish to the longest piece. Ambitious pupils often ask, 'When shall I play in concert, with an orchestra?' The performance of a sonata is much more difficult; an orchestra steadies you, gives you an opportunity to rest, and to start afresh with a new impetus. I am, let me add, very autocratic as a teacher; democracy in tuition is quite out of place, and I admit of no discussion.

"Mechanism is more widely diffused at present than it was in the past. It is a good deal like acrobatic feats: first some one turned a double somersault, then a triple, and finally a quadruple one. Nowadays, too, pupils have more frequent opportunities of hearing great performers. On the other hand, professional critical opinion is less accurate than it was, because exposed to more numerous and varying influences. The

use of the memory in music has grown immensely; had it not, Wagner would be impracticable. In my time, Beethoven's last sonatas were never played without notes; even Liszt, after 1857, shrank from the effort. Fugues were the great things, and they were seldom memorized. The infant prodigies—do not despise them, a great man must have commenced somewhere—first resorted to memorizing. Liszt played his fugues from memory—Bach's prettiest and most effective, of course—and Sophie Bohrer had twenty-four of them by heart. A good system of committing helps; the music should be studied phrase by phrase, and each part thoroughly digested before further progress is attempted. The singer derives great assistance from the words, the instrumentalist none. The effect of Wagner's music upon the use of the memory has been marked, and the continual increase in the number of skilled conductors has vastly broadened that composer's influence, ability to memorize his music growing proportionately. The process is in some respects a mechanical one, but it has been useful to music generally. In my time, a musician sang the note; now he speaks it."

XIV. SCHUMANN'S "VOGEL ALS PROPHET"

By William H. Sherwood

Schumann's Inspiration—How to Analyze a Composition—Application to the Present Piece—Rules for its Correct Interpretation and Performance.

THE finest qualities of genius, the combination of which would distinguish painter, poet, and musician, are united in the rare beauties of many of Schumann's smaller and less ambitious works. So many pretty legends are found in German literature, such attractive tales of the past are told in connection with the places visited by tourists in Germany, that one can believe this most sensitive and imaginative tone-poet had in mind some story of pathetic or sentimental interest, or some omen implied by the singing and flitting of a bird to suggest such a composition and title. I shall leave the reader to follow the suggestions of his own imagination or sentiment. The student, however, needs more practical aid in order to master the difficulties of execution, expression, and artistic delivery presented by this piece.

As in Rubinstein's "Étude on False Notes," almost every *accented* note of melody in our principal subject is *dissonant* to the harmony belonging thereto. The next succeeding note (in each case) is the harmonic "resolution," or tone showing to what chord the voice

containing the preceding dissonant tone belongs. The student should examine and *listen to* this harmonic blending of tones, and be able to explain each chord and its accessory notes as used by the composer, to trace the relation of one chord to another in the sequences and phrases, and that of the whole group to the keynote. Notice the modulations from the principal to related keys. Notice the proportion of measures and phrases in the original key (G minor) and in related keys, and their arrangement and order. Notice the transition from G minor to G major at the "Trio," or second part of the composition; the relative length of the different parts; the number of phrases therein; the transition from the "Trio" to the repetition of first subject in the original key. Notice the contrast between the quick, flitting arpeggios and sympathetic, weird accents in the first subject, and the smooth legato phrases and more happy, serene expression of the second. The phrases throughout the piece begin on the fourth beat of the measure (in $\frac{4}{4}$ time), and end variously on the second or third beat of a succeeding measure.

A musical phrase is equivalent to a sentence in speech, conveying a complete idea to the mind of the listener. This being the case, I consider the first two groups (two complete measures) equivalent to a phrase, although divided by nearly half a measure of rests and by several slurs. Looking at it another way, one might call the entire first four measures (i.e., *parts* of measures at the beginning and end and three full measures between) one phrase, containing antecedent and consequent divisions. Combine the natural measure-accent in $\frac{4}{4}$ time with the general habit of

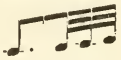
accenting each dotted eighth note. A correct taste in outlining a plan which settles the relative importance of such features is as important in connection with the foregoing analysis of the music as is an accurate map to a surveyor or a correctly proportioned drawing to an architect.

Form is the first element that is apparent in plastic art; perhaps the last to be comprehended in music. By taking mental account of the harmonic, melodic, and rhythmic structure of a composition, including such elements as are here suggested, we may spend our practice time to far better advantage than would otherwise be possible. There is scarcely a measure in which combined good judgment and natural taste would not dictate decided rules for crescendo and diminuendo effects. I have endeavored to mark such as my particular experience suggests. The rule of crescendo when ascending the scale and diminuendo when descending generally proves good.

Every complete sentence has its noun, verb, and their modifiers. The relative importance in meaning of such words is expressed by a good speaker by great variety of intonation. The relative values of notes in a phrase are equally varied. The average phrase should commence with a subordinate accent, gradually increase (crescendo) toward some high note or some principal measure-accent near or beyond the middle of the phrase and decrease toward the end. There may be two climaxes of unequal importance in one phrase, and there is nearly always a series of phrases leading toward a climax, and forming a separate "period" for each division of a piece.

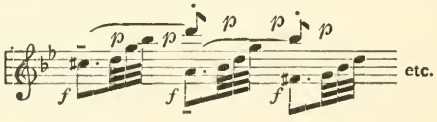
Turning to our subject, "Vogel als Prophet," we find

in the ninth, tenth, eleventh, and twelfth measures a continuation of melodic phrases in regular sixteenth notes alternating with the typical motif figure



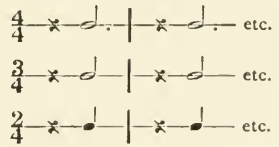
At the ninth measure the left hand uses the first subject, as given out by the right hand at the beginning of the piece, as a counterpoint *against* the new motive of sixteenth notes. The manner in which the dialogue of voices begun at this point is carried out in subsequent measures should be clearly unraveled and each motif traced to its own ending. For example, in the fifteenth measure, each *beginning* on a dotted eighth note is marked forte, and sustained (legato). The *continuation* of each motif is marked piano and ends staccato.

It is a good general rule for pianists to raise the fingers one to two inches from the keys preparatory to playing ordinary running passages. But such are the delicacy and rapidity necessary in playing these (unaccented) triplets of thirty-second notes that expressive playing can be better accomplished if the fingers be kept quite close to the keyboard (generally curved) for the thirty-second notes, and held high only for the accented eighths. It is difficult to play some of these figures smoothly according to the fingering used in the ordinary editions. The writer believes that the following plan of practice will obviate much of the difficulty of controlling the damper pedal and



at the same time develop accurate taste. The fingering marked throughout is satisfactory *only* when the pedal is used as indicated. Artistic pedal playing requires better teaching, better self-control, and better taste than is at all usual among pianists. Music publishers would do well to adopt a new and more accurate system of pedal marks. The following sign (⊢⊣) here denotes the exact time for beginning and ending the pedal tread. Many players are so in the habit of putting the pedal down with the accented beat that it is very difficult for them to acquire the control and discrimination here required. Others are too violent, putting the foot down heavily and lifting it too high. With ordinary pianos a half-depth is enough for the use of the pedal, and a silent lift, not high enough to lose contact of the foot with the pedal, is generally sufficient to dampen accurately, and can be done delicately enough to avoid all unnecessary noise. Most pupils practise too fast, and many do not appear to *listen* to their own playing. For such this article is not intended.

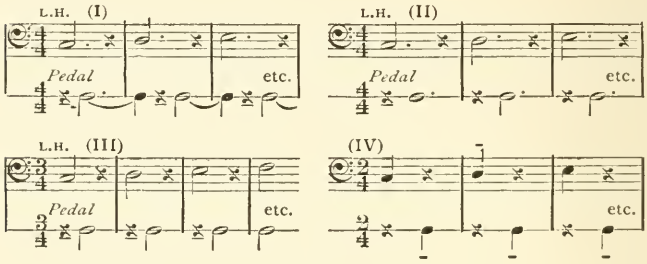
Exercise for slow practice. Damper pedal alone. Count four. Release pedal at *one,* put it down at *two,* keep it down until exactly *one* of next measure. Next count three. Then count two. Care must be taken to



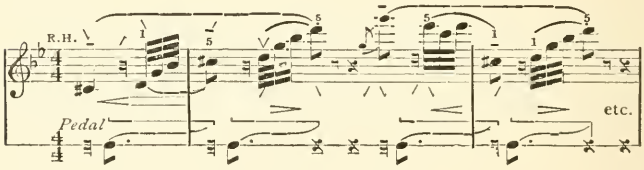
keep the pedal down the complete time of the second, third, and fourth beats, and to let it up the *full* time of the first beat; also to see that its use causes no noise.

The next exercises are to be practised very slowly and with equal accuracy and care of pedal and hand.

The result in each case above illustrated (except No. 1) should be an exact legato, without either disconnecting or overlapping the tones.



Applying the above to "Vogel als Prophet," count sixteen to each measure, or four for each quarter note or its equivalent. Hold the notes the exact time indicated; ditto pedal. Keep the foot up from the exact beginning of rest until time to put it down. Unless complete control of time for different details is developed this practice is of little value. Substitute the pedal mark (⌙) for the above. Count sixteen each measure in the "Trio," also, in preliminary pedal practice.

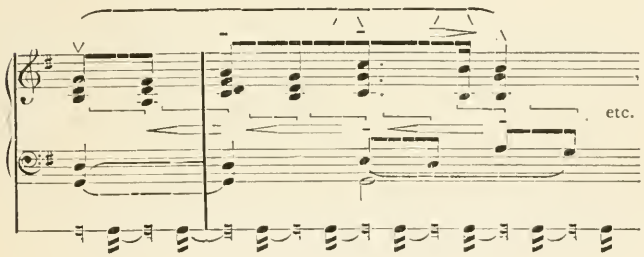


The sixteenth rests written above are not to appear as rests in the expression of the music. The use of pedal correctly controlled will always give the result

THE MANDOLIN-PLAYER

From the Painting by Conrad Kiesel

of continued legato as in the original, but, if allowed the privilege of taking the hand up at the intervals indicated by the rests, the player can in each instance stretch the hand over the next group of notes, and thus, through the use of the fingering indicated, be enabled to play more readily with delicacy and repose. A still hand and complete legato finger-touch are advisable during the continuance of each slur in the "Trio," unless during an accented climax. The method much used by Rubinstein, D'Albert, Paderewski, and others, of undulating the forearm at the wrist while keeping the fingers at or near the keys between phrases, can be so applied as to add finish and grace and improve the tone. It is neither generally well understood nor used with artistic effect, and it is difficult to teach. The more common habit of throwing the hands up and down from the wrist, while entirely correct for many kinds of staccato, is unsympathetic and artificial when applied to such phrasing and such expressive music as we have in "Vogel als Prophet." The common habit of mixing up finger, wrist, and knuckle-joint action indiscriminately causes players who otherwise show good qualities in regular legato playing to play staccato and half-staccato badly, and to phrase worse. The



marks \ and / show examples of down or up wrist (not hand) movements. The mark ⌣ indicates a combination (undulation) of both movements, usually to be effected in a very mild, not exaggerated, manner.

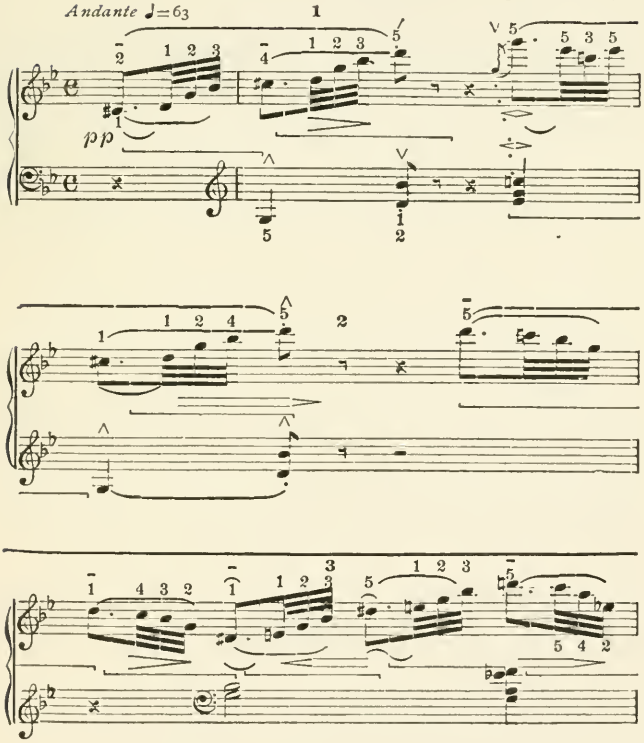
As the measures after the twenty-seventh are a repetition of the first page, the student is advised, where marks are omitted, to learn and play the piece as marked at the beginning.

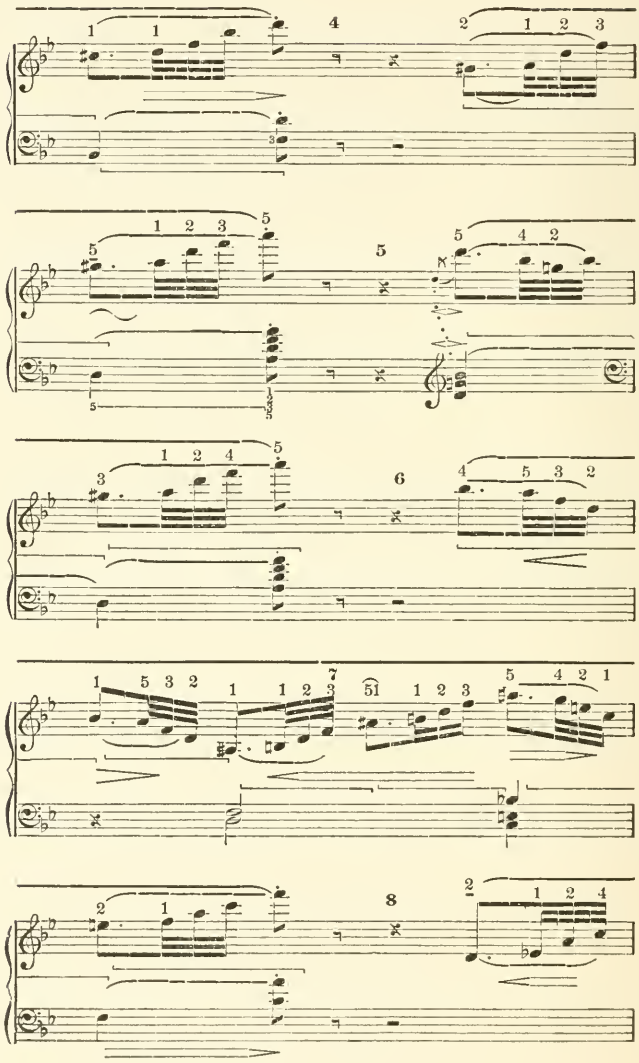
VOGEL ALS PROPHET

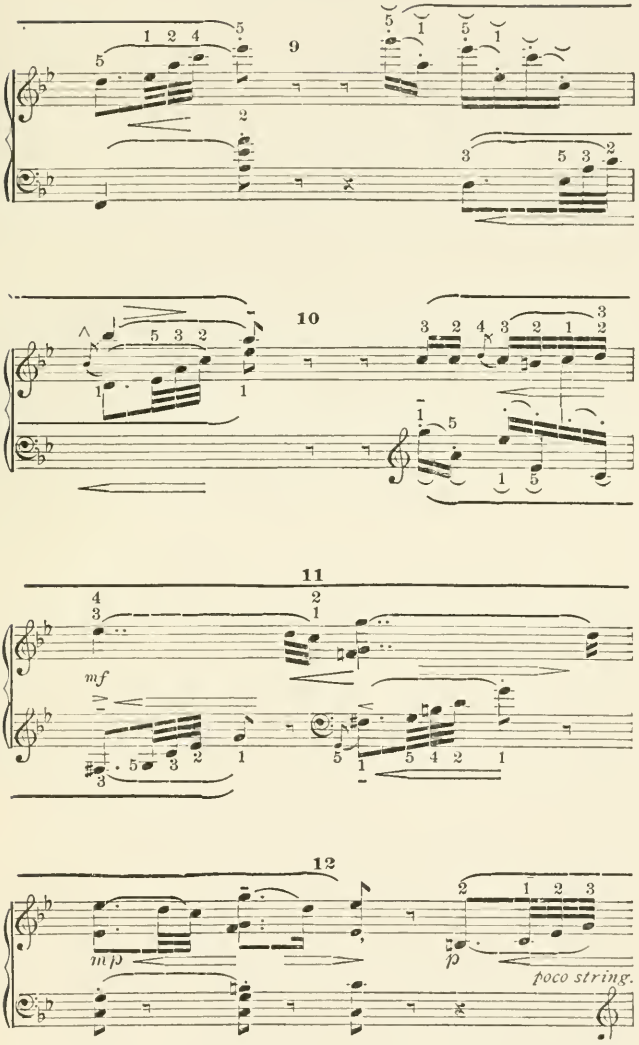
THE BIRD'S PROPHECY

EDITED BY WILLIAM H. SHERWOOD

R. SCHUMANN Op. 82, No. 7



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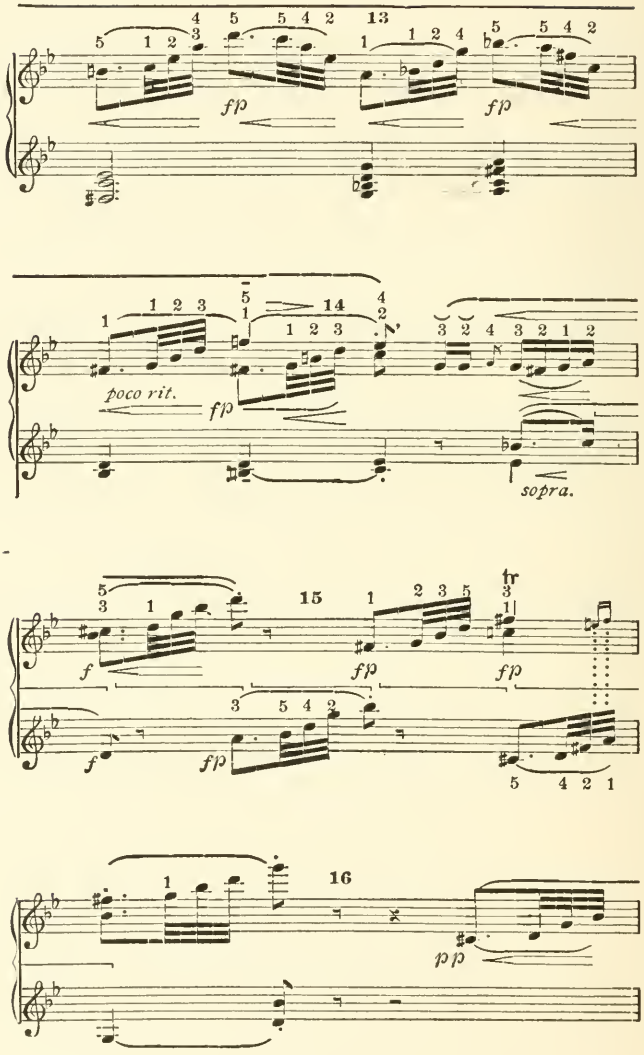
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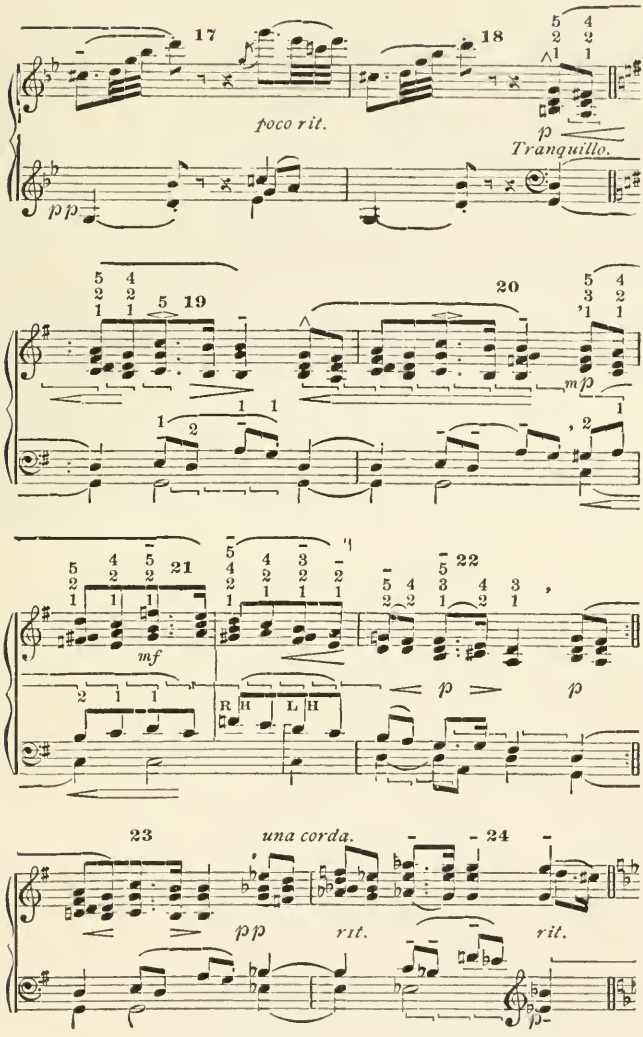
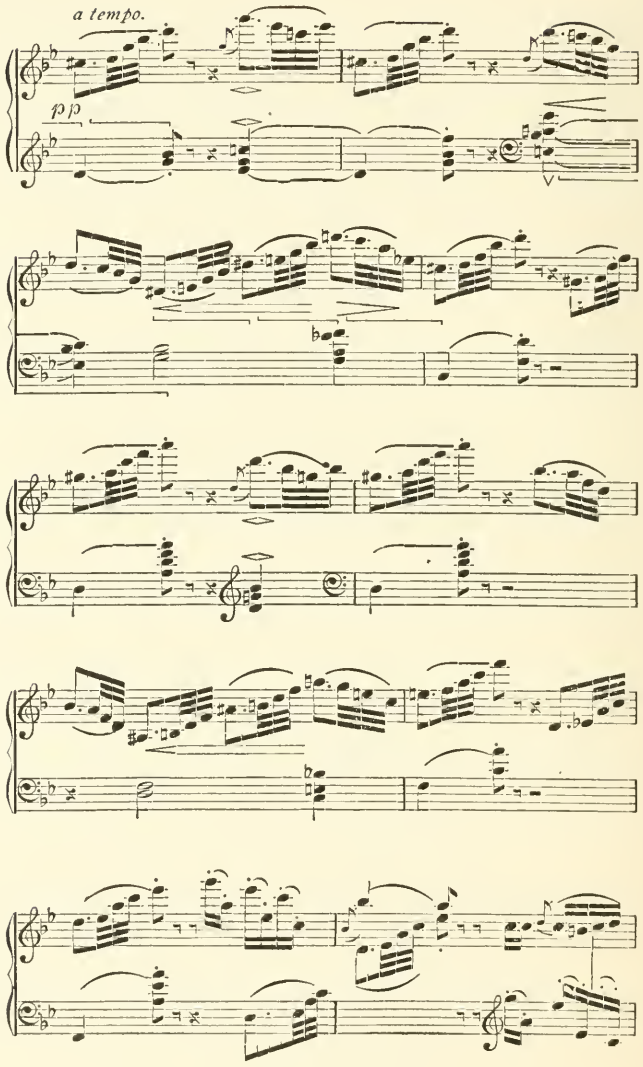


(The Editor repeats measures 19-22, inclusive.)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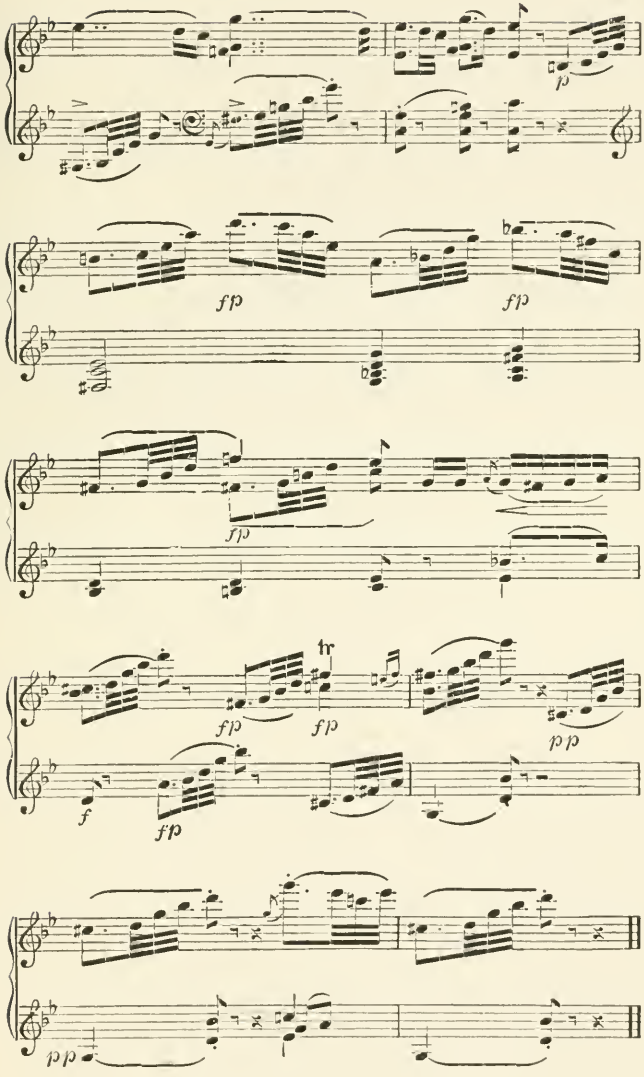
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